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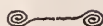
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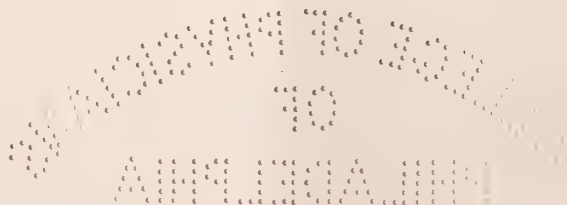
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CONTRIBUTORS TO VOLUME XXXVI.



Ames, Delano, A. B., M. D.....	383	Mansfield, A. D., M. D.....	202
Anderson, Edward, M. D.....	111	Mattfeldt, Charles L., M. D.....	367
Barclay, William F., A. M., M. D., 23, 275,	299	McCormick, John H., M. D.,.....	425
Barker, Lewellys F., M. D.....57,	281	McGuire, Stuart, M. D.....	205
Bieser, Augustus E., M. D.....	293	Merrick, S. K., M. D.....	152
Biggs, Herman M., M. D.,.....	295	Nolen, Charles F., M. D.....	25
Birnie, C., M. D.....	132	Osler, William, M. D.....73,	423
Bishop, Francis A.....	441	Pennington, John I., M. D.....	449
Blake, John D., M. D.....	199, 368	Preston, George J., M. D.....55,	127
Bond, A. K., M. D.,.....	209	Price, Joseph, M. D.....	91
Browne, B. Bernard, M. D.....1, 163,	354	Reed, R. Harvey, M. D.....	5
Buckler, Thomas H., Jr., M. D.....	470	Reik, H. O., M. D.....	109
Chancellor, C. W., M. D.....315,	403	Robbins, Henry Alfred, M. D....261, 311,	
Chew, Samuel C., M. D.....	181		332, 444, 461
Clement, A. W., V. S.....	217	Roberts, John B., M. D.....	97
Crutchfield, Eugene Lee, M. D.....	100	Rohé, George H., M. D.....148,	365
De Lee, Joseph B., M. D.....	59	Rosse, Irving C., M. D.....	19
Fite, C. C., M. D.....	168	Penniman, W. B. D., A. M., Ph. D.....	412
Flexner, Simon, M. D.....	145	Sanger, Frank Dyer, M. D.....	235
Fulton, John S., M. D.....	347	Savage, Moses, M. D.....	318
Garcin, Ramon D., M. D.....	357	Simon Charles E., M. D.....37, 74, 257,	329
Gibbons, E. E., M. D.....	319	Sims, George K., M. D.....	42
Hardcastle, J. H., M. D.....	112	Solis-Cohen, Solomon, M. D.....	335
Hartwig, Chas. W., M. D.....	264	Stabler, August, M. D.....	430
Herring, Arthur, M. D.....	219	Steuart, James A., M. D.....	459
Hodgdon, Alexander L., M. D.....	431	Stokes, Wm. Royal, M. D.....217, 389,	407
Howard, William Lee, M. D.....	466	Thayer, Wm. Sydney, M. D.....	221
Hundley, J. M., M. D.....	134	Turner, John, M. D.....	279
Huntt, J. R., M. D.....	406	Upshur, J. N., M. D.....40,	163
Jones, C. Hampson, M. D.....	2	Watson, Wm. S., M. D.....	241
Livingood, Louis E., M. D.....	409	Welch, William H., M. D.....	392
Long, J. W., M. D.....	80	West, Charlotte, Dr.....	335
Woods, Hiram, Jr., M. D.....	319		



INDEX TO VOLUME XXXVI.

	PAGE		PAGE
Abscess, Ovarian, After Delivery.....	341	Cold, Curing a.....	140
Abused Members.....	271	Consumption, Sanitariums for.....	473
Alcohol, Absolute, as a Disinfectant for Instruments.....	67	Contagious Diseases, The Origin and Spread of.....	99
Alcohol Question, Common Sense on the	434	Convulsions, Infantile, The Etiology of..	235
Alvarenga Prize.....	31	Convulsions, Puerperal, From the Stand- point of Prevention.....	165
Anacidity, Nervous, An Interesting Case of.....	318	Cornea, Experimental Inflammation of the.....	429
Anemia, Pernicious, With Distention of the Large Intestine.....	113	Correspondence.....	31, 84, 102, 139, 284
Anesthesia Jubilee, The.....	33	Craze for Operating, The.....	323
Anesthetics, Administration of.....	87, 103		
Anti-streptococcic Serum.....	469	CURRENT EDITORIAL COMMENT.	
Antitoxine a Bone of Contention in the Therapeutics of Diphtheria, Why is?..	293	17, 36, 53, 71, 89, 107, 125, 143, 161, 179, 197, 233, 255, 273, 309, 326, 345, 381, 401, 421, 456, 475	
Antitoxine in Diphtheria.....	295		
Aphasia, Curiosities of.....	201	Cycling, Corpulence and Leanness.....	395
Appendicitis Craze and the Grape Cure, The.....	19	Cystitis, Chronic, and Ulcer of the Blad- der, Artificial Vesico-Vaginal Fistula for the Cure of.....	163
Appendicitis, The Causes of.....	314	Cystoscopy and Ureterscopy.....	80
Arteries and Veins, The Repair of.....	306	Death, The Hour of.....	378
Articles, Copyrighted.....	209	Delivery in the Moribund.....	284
Atresia and Its Causes.....	229	Dermatitis, x Ray... ..	399
Autopsy, Is it Correct?.....	469	Dermatology, Recent Progress in.....	267
Bile, The Secretion of.....	418	Diagnosis, Municipal.....	123
Births, Deaths and Diseases? Should Physicians be Paid for Returns of.....	365	Diagnosis, The Importance of Laboratory Methods in.....	37, 74, 257, 329
Bladder, Female, The Cystoscope in Dis- eases of the.....	134	Diets, A Bureau of.....	253
Book and Journal Club, The.....	51	Diphtheria.....	399
		Diphtheria, A Few Facts that Emphasize the Importance of Medical Inspection of Schools for the Prevention of.....	383
BOOK REVIEWS.		Diphtheria, Bacteriological Demonstra- tions of.....	389
17, 35, 53, 71, 89, 107, 125, 143, 161, 179, 197, 215, 233, 255, 273, 290, 309, 326, 345, 363, 381, 401, 421, 439, 457, 475		Diphtheria, Clinical and Bacteriological Diagnosis of.....	392
Bubonic Plague, The.....	287	Diphtheria, Laryngeal, Personal Experi- ence with.....	241
Bullets in the Brain and the Röntgen Rays.....	85	Diphtheria, Laryngeal, Treatment of... ..	111
Burns, Picric Acid in.....	376	Diphtheria Organisms in Healthy Persons	15
Business End of it, The.....	68	Diphtheria, Walking.....	251
Cancer, Bacterial Treatment of.....	433	Diseases of the Aged.....	87
Cancer, Heredity of.....	283	Dispensaries Really Abused? Are.....	264
Carcinoma, Amputation of the Breast for	49	Dispensary Abuse.....	213
Catarrh, Medicinal.....	208	Dropsy, Encysted, of the Peritoneum, A Case of.....	354
Cesarean Section, A Case of, Successful for Mother and Child.....	39	Drunk, Found.....	331
Chest Expansion and Phthisis.....	397		
Chloralose.....	366		

	PAGE
Dysentery, Acute, A Method of Treating.	359
Ear Affections, Vaseline in Middle	85
Eastern Shore, The	14
Eating, Irregular.	372
Eclampsia and the Milk Treatment.	298
Eclampsia, Puerperal.	120
Emaciation, Artificial, The Danger of.	163
Embryos, Human, Wanted.	284
Emulsions	361
Endometritis, Senile, and Vaginitis.	117
Endothelioma of the Vaginal Cervix, A Case of.	151
Enucleation of the Eye Under Cocaine	67
Epilepsy, Alcoholic Maniacal.	466
Epilepsy, Focal, The Surgical Treatment of.	67
Epileptics, Treatment of.	230
Esophagotomy, Internal.	435
Eye and Ear, Report of Progress in Diseases of the	319
Eye, Report of Progress in Diseases of the	115
Eye-Strain, Ocular Manifestations of.	103
Faculty's Meeting at Hagerstown, The.	50
Feces, The.	271
Fever, Bubonic, A Study of.	403
Fever of Childhood, A New.	419
Fevers, Continued.	132
Fibroids of the Uterus Treated by the Apostoli Method	227
Filters, Sand	211
Filtration, Water.	213
Fishbones in the Pharynx.	323
Flatulence and Indigestion in Nursing Women	49
Formaldehyde	377
Frick, Charles, M. D.	181
Frick Library Dedication, The.	141, 176
Frick Library of the Medical and Surgical Faculty.	187
Funeral Regulations for Rural Districts.	406
Gall-Stone, Bowel Obstruction by a Simulating Appendicitis	112
Gastric Hyperacidity by Methyl Blue, Treatment of.	204
Gastro-enterostomy	212
Generation, The Science of, and its Phenomena	275
Gonorrhea, Acute, Treatment of	199
Gonorrhea, Ichthyol in.	171
Gonorrheal Arthritis.	377
Graves's Disease Treated Surgically	413
Grippe Again, The.	323
Growth, The Influence of Exercise on.	140
Gynecological Work, Unnecessary.	23
Gynecology, Report of Progress in	470
Hagerstown Meeting, The.	68, 104
Health, Action of Boards of.	191
Health Officers, The Conference of.	300
Health, The State Board of.	287
Heart Disease, Chronic, The "Schott Method of Gymnastics in.	335
Heart, The, under Röntgen Illuminations.	113
Hematoma of the Dura Mater	226
Hematoma of the Vulva after Normal Labor.	120
Hemianopsia in Abscess of the Brain.	411

	PAGE
Hemorrhage from Bone Arrested by Nails	113
Hemorrhoids by Whitehead's Method, The Treatment of.....	192
Higher Medical Education.....	437
Hospital Appropriations.....	398
Hot Rooms and Catching Cold.....	228
Hydrocephalus, Operation for.....	211
Hydrophobia.....	267
Hysterectomy, Total, at Term; Con- tracted Pelvis.....	395
Hysteria Simulating Eclampsia in Preg- nancy.....	469
Hysterical Achillodynia.....	110
Impetigo, Contagious.....	228
Inflammation, Purulent, of the Milk Ducts Affecting Seventy Cows, An Epi- demic of.....	217
Injections, Hypodermic, The Responsi- bility of Treatment by.....	13
Insanity, Post-febrile.....	431
Insomnia and Gastro-Intestinal Disease.	118
Intestine, Japanese, The.....	323
Intubation for Croup in Country Practice	435
Journal for 1897, The.....	194
Kidney, Rupture of.....	163
Kidney, The Author's Method of Anchor- ing the.....	5
Labor, Protracted, A Case of.....	40
Law, A Good, Enforced.....	177
Lessons from a Sad Coincidence.....	123
Library, The Faculty.....	252, 323
Literature, Medical, Copyrighted.....	213
Lithia Water.....	231
Malaria in the Puerperium.....	105
Malaria, The Prevalence of.....	206
Mal-Presentations.....	376
Malt Extracts.....	270
Maryland Hospital for the Insane, Dr. Richard Sprigg Steuart and.....	459
Massage in Fractures.....	471
Measles, A Statistical Study of Epidemic	229
Measles, Mouth Symptoms of.....	379
Medical and Chirurgical Faculty, The...	436
MEDICAL ITEMS.	
16, 34, 52, 70, 88, 106, 124, 142, 160, 178, 196, 214, 232, 254, 272, 288, 308, 326, 344, 362, 380, 400, 420, 438, 456, 474	
Medical Record, The.....	213
Medicine Abroad, The Study of.....	33
Medicine, Experimental.....	361
Medicine, Practical <i>versus</i> Scientific....	202
Menstrual Skin Eruption.....	157
Mental Fatigue and Exercise.....	266
Milk for Babies.....	86
"Mirror Speech.".....	226
Mortality of the Negro.....	15
Nap, The Afternoon.....	192
Narcosis, Chloroform, A Narrow Escape from Death During.....	100
Needle, Surgical, The Perfect.....	97
Nerve, Glosso-Pharyngeal, Results of Partial Section of the.....	193
Neuralgia, Obstinate, Treated by Pressure	285
Neuritis Associated with Typhoid Fever.	55
Neuritis, Puerperal.....	101
Neurology, Some Histological Points in,	57

INDEX TO VOLUME XXXVI.

V

	PAGE		PAGE
Nihilism, Therapeutic.....	121	Clinical Society of Maryland.....	31, 62, 247
Nitroglycerine, The Dosage of.....	81	Conference of Health Officers of the State of Maryland.....	373, 396, 414, 433
Nitrous Oxide in Minor Surgery.....	279	Medical and Chirurgical Faculty of Mary- land.....	137, 155, 172, 186
Obituary. Philip C. Williams.....	127	Medical and Surgical Society of the Dis- trict of Columbia.....	453
Obstetrics, Primitive.....	13	Mississippi Valley Medical Association.....	7, 27
Optician, The Traveling, Or the "Profes- sor".....	25	New York Medico-Surgical Society.....	303
Osteomalacia Cured by Oophorectomy..	121	Richmond Academy of Medicine and Surgery.....	47, 82, 207
Paralysis, Facial, Extraction of Teeth and.....	211	Tri-State Medical Association, The.....	340
Paralysis, Post-Diphtheritic.....	221	Spelling, Medical.....	195
Paralysis, Temporary, Following Gastric Disturbance.....	225	Spine, Percussion of the.....	397
Paralysis of the Ulnar Nerve from Cy- cling.....	377	Spring Medical Meetings.....	436
Paresis, General, The Early Symptoms of.....	148	State Board of Health, The.....	69
Pasteur Institute for Baltimore, A.....	158	Static Electricity, Some Physical and Therapeutical Facts on.....	441
Pediatrics a Specialty?.....	437	Statistics, The Value of.....	347
Pediatrics, Report of Progress in.....	209	Sterilized Milk, Danger in.....	473
Perils, Unsuspected.....	185	Stethoscope, The Improved.....	419
Pharyngeal Tonsil, To What Extent Does the Hypertrophied, Atrophy at or about Puberty.....	152	Study, Thoroughness in.....	2
Phonendoscope, The.....	63	Surgery, The Abuse of.....	315
Phrenology, The Old and the New.....	281	Suture of the Arterial Walls.....	157
Phthisis, The Treatment of Vomiting in Physician in Literature, The.....	285	Syphilis, Cerebral.....	127
Physicians and Pharmacists.....	342	Syphilis of the Innocent.....	261
Physicians as Citizens.....	307	Syphilis, The Treatment of.....	311, 332, 447, 461
Physician's Care of Himself.....	378	Syphiloderm, The Treatment of the.....	227
Physicians, Underpaid.....	192	Teeth, Artificial, The Dangers of.....	356
Physician Was Right.....	379	Toe-Nail, Ingrown, The Mechanical Treatment of.....	285
Placenta Previa, A Case of.....	449	Tuberculosis in Infancy.....	193
Plague in Bombay.....	317	Tuberculosis, The Early Diagnosis of...	434
Pleurisy Under Five Years.....	343	Tuberculosis Treated by the Salts of the Blood.....	391
Pneumonia, Acute Lobar, The Treatment of.....	357	Tuberculosis, Vomiting in.....	359
Polyuria, Hysterical.....	284	Typhoid Diagnosis.....	141, 159
Pregnancy and Labor Complicated by Uterine Fibroid Tumors.....	119	Typhoid Fever, Aerial Convection of...	285
Pregnancy Under Difficulties.....	46	Typhoid Fever, Demonstration of the Pathology and Bacteriology of.....	409
Prophylaxis, Personal and Domestic.....	369	Typhoid Fever, Hemorrhage from the Bowels in.....	73
Rectum and Anus, Diseases of the.....	42	Typhoid Fever, Remarks on the Pathol- ogy and Bacteriology of.....	145
Renipuncture in Albuminuria.....	398	Typhoid Fever, Sanitary Survey of Towns and Villages for the Prevention of.....	425
Resolutions: Thomas Carnes Price, M.D.	190	Typhoid Fever, Serum Diagnosis of.....	104
Respiration, Artificial, New Method of..	61	Typhoid Fever, The Disguises of.....	423
Rheumatism, Joint, The Causation of..	105	Typhoid Fever, Too Much.....	32
Rigors in Children.....	230	Typhoid Fever, Useful Medication in...	193
Röntgen Rays, The, Showing the Practi- cal Utility in Locating Hidden Bullets.	219	Typhoid Fever, What Country Doctors can do to Prevent.....	430
Salivation a Symptom of Mollitis.....	391	Typhoid Perforation, Surgery for.....	91
Sanitary Conference, The.....	324	Typhoid Test, Widal's.....	359
Sanitary Progress and Disease Restriction	286	Uremia in Pregnancy without Eclampsia	155
Science of Generation and Its Phenome- na, The.....	299	Urethra, Residual Urine of.....	205
Sclerosis, Multiple, Pathology of.....	171	Uterine Canal, Gauze in the.....	79
Secrets, Proprietary.....	343	Uterine Fibromata, Vaginal Ligation of the Uterine Arteries for.....	283
Serums, Anti-Diphtheritic and Anti- Streptococcic.....	168	Uterus, Backward Displacements of the..	204
Sex, The Causation of.....	359	Uterus, Retro-Deviations of the.....	1
Skiascopy, The Practical Use of.....	109	Vaginal Irrigation, An Ingenious Method of.....	366
SOCIETY REPORTS.		Viburnum Prunifolium a Prophylactic Against Abortion.....	120
Baltimore Medical Association....	83, 114, 207, 451		
Chicago Gynecological and Obstetrical Society.....	64		

	PAGE		PAGE
Vital Statistics.....	367	Warty Growth of the Genitals, Treatment	
Water.....	33	of.....	228
Water, Drinking, Demonstration of the		Whooping Cough, The Parasite of.....	157
Chemical Examination of.....	412	Woman and Her Diseases, <i>vs.</i> Gynecology	66
Water, The Bacteriological Examination		Woman's Milk and Antitoxine.....	131
of.....	407	Writers, The Older.....	87

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Original Articles.

RETRO-DEVIATIONS OF THE UTERUS.

CLINICAL LECTURE DELIVERED AT THE WOMAN'S MEDICAL COLLEGE OF BALTIMORE,
OCTOBER 2, 1896.

By B. Bernard Browne, M.D.,

Professor of Gynecology, Woman's Medical College.

IN beginning the clinical work of the present session, I would like to impress upon every member of the class the importance of a careful examination and study of each case presented to you at the dispensary clinic.

In some of the patients that come before you for examination the pelvic organs may be found in a condition almost normal; such cases should be very instructive to you for they give you an opportunity of obtaining an accurate knowledge of the size, shape and position of the healthy organs and thus you will be much better prepared to recognize and appreciate the changes and deviations produced by disease and misplacements.

Every physiological or pathological condition of the pelvic organs is attended by variations more or less marked either in their tissues, their shape, size, or in their relative positions, and often in all. Hence the necessity of keeping continually before us the normal standard by which we may estimate the abnormal deviations and understand how these may be corrected.

The cases that will be presented to you today will be of retro-displacements of the uterus.

CASE I.—G. P., colored, single, aged

21, had one child four years ago, two miscarriages the last two years ago, has dysmenorrhea and leucorrhea and constant pain in the back. Upon examination we find the cervix lacerated bilaterally, the uterus enlarged and in a state of subinvolution, the fundus being in the hollow of the sacrum and not movable; the tubes and ovaries are in a normal condition.

The sound, which was formerly used for diagnostic purposes, has been supplanted by bimanual examination; at the present time it is seldom used except for the purpose of confirming a diagnosis previously made. In this case we shall use it for the latter purpose and find that the diagnosis of retroflexion is correct; we will now determine whether the uterus is movable and susceptible of being replaced.

We introduce two fingers into the vagina and carry them up to the posterior cul-de-sac; by lifting the fundus with the two fingers and depressing the proximal end of the sound and at the same time rotating it, we find that the uterus is readily replaced, but will most likely go back to its old position as soon as the woman gets up and walks about.

We will send the patient into the

hospital, and as her tubes and ovaries are in a healthy condition, the uterus will be curetted, the laceration repaired and the organ restored to its normal position and kept so by a retroflexion pessary until the repair of the cervix has been completed and involution of the uterus takes place.

CASE II.—Lizzie R., aged 21, colored, married two years, one child one year old, which died soon after birth; she has menstruated regularly since and has had a great deal of pain in the back and profuse leucorrhea. This patient first came to the clinic on July 12, and upon examination it was found that she had a retroflexion and endometritis; she was advised to go to the hospital for treatment, which would have consisted of dilatation, curetting and thorough tamponing and restoration of the displaced uterus.

As she was unwilling to enter the hospital at that time, palliative treatment was adopted; the uterus was replaced and a retroflexion pessary was

adjusted, which she has worn with comfort up to the present time.

As this woman intends leaving the city next week and expects to make her home at a distance we will remove the pessary before she leaves for fear some accident might occur to her from its use. After pessaries are introduced patients should be kept under constant observation, as many injuries have occurred from their improper use; sometimes they cut into the bladder or rectum.

A pessary should never be introduced until the uterus has been replaced to its normal position; if adhesions exist it should not be used; if the tubes and ovaries are diseased or if there is intra-pelvic disease a pessary generally does harm. However, in many cases of prolapsed ovary accompanied by retroflexion, replacement of the uterus and adjustment of a pessary with a broad posterior bar will correct the displacement of both ovary and uterus. All rational means should be availed of to save the healthy pelvic organs from extirpation.

THOROUGHNESS IN STUDY.

ADDRESS DELIVERED AT THE OPENING OF THE TWENTY-FIFTH ANNUAL SESSION OF THE COLLEGE OF PHYSICIANS AND SURGEONS, SEPTEMBER 31, 1896.

By C. Hampson Jones, M. D.,

Professor of Obstetrics.

GENTLEMEN :—It is at once a pleasure and a torture to welcome you tonight. A pleasure to represent the faculty in extending their greeting and well-wishes to you, but a torture to have to put it in writing and read it for fear I should forget the formula.

Some of you have passed your second mile-stone in your journey towards the entrance into that country that you have chosen for your life-work. Others have passed your first mile-stone and are anxiously gazing upwards to the second, where you expect at least to obtain a distant view of the promised land. And there are yet others of you who are about to begin your journey, perhaps with some fear and trembling, but

with stout hearts you console yourselves with the thought "Others have journeyed successfully, why not I?"

When your period of probation is over, when your three or four years' journey is finished by passing through the portals into this unknown country, what do you expect to find?

Why should I attempt to produce a composite picture of all your ideas? It would only be confusion; for how could one successfully blend that idea formed by one whose life has already been that of toil and self-reliance with that idea formed by one who has yet to meet the buffetings of this world?

All of you have in your minds some particular goal to reach before you would

consider yourselves successful. Everyone must have this incentive to work, but do not become discouraged as in the years to come you find that you approach your ideal goal very, very slowly, or, indeed, that your goal has not apparently receded.

One seldom reaches as high an ideal as he placed before himself in the beginning, but in his honest efforts to attain he has unconsciously strengthened and developed himself and has raised the average of his profession.

What is the best way for you to prepare for your life-work for you to reach your ideal success? Shall I advise you what to do and what not to do?

Everyone is interested in young men, particularly when they begin to lay the foundation for their careers in life, but no one person is ever in position to point out the way for all people by his own experience. Suppose one should venture to give general advice, would it be followed?

Look over the writings of philosophers for thousands of years and you will find the same advice, varied only in degree and style. With those of the Scriptures in both Old and New Testaments, you are familiar; probably also with those of the Greek and Asiatic philosophers. Have you been influenced by them; will you be guided by them in the future? I will not repeat all the admonitions, but I venture to call your attention to one that is said to have been formulated by Epictetus.

"Thou art a fool if thou desire wife and children and friends to live forever, for that is desiring things to be in thy power which are not in thy power, and things pertaining to others to be thine own. So also thou art a fool to desire that thy servant should never do anything amiss, for that is desiring evil not to be evil, but something else. But if thou desire never to fail in any pursuit, this thou canst do. This, therefore, practice to attain, namely, the attainable."

"Think that thou shouldest conduct thyself in life as at a feast. Is some dish brought to thee? Then put forth thyself in seemly fashion. Doth it pass

thee by? Then hold it not back. Hath it not yet come? Then do not reach out for it at a distance, but wait till it is at thine hand."

Your stay with us is short, but during that time we must build a foundation upon which you will erect in future years the superstructure. This superstructure must be built by you and for its magnificence in beauty and design you will be held justly responsible.

In the construction of the foundation, however, we feel ourselves to a great degree responsible for the soundness of it. The past decade or decade and a half has seen in all countries very great changes in this foundation and these have been most marked in our own country. The foundation has been made deeper and broader and some assistance is rendered even in designing the superstructure instead as in former days of digging a foundation the first year, the second year throw in some stone, lime and sand and tell you "go build."

Many physicians are still found (but I am pleased to note that one must seek them) who, dazzled by the magnificent superstructures that have been erected upon that simple narrow two-year foundation, hold that we today are asking too much time of our young men in laying the foundation. Doubtless some of you have heard such talk but yet have wisely concluded to build your foundations broader.

People constantly conclude falsely by studying exceptions rather than the rule and seeing only the occasional great and grand successes under the old regime conclude that they are because of it rather than in spite of it. Study these exceptions, get a truthful record of their lives, and you will find that they quickly saw where they were weak, they saw that their foundations were too narrow and too shallow; they did not wait to see how much they could build on such foundation but at once began to broaden themselves in every way by taking an extra course here and another there, getting privileges of work in free clinics, etc., when they could labor diligently, making mistakes but never ceasing to broaden in knowledge

and increase in wisdom until their fellow graduates and associates suddenly became aware of the fact that giants had developed amongst them.

But what of the others who did not see their necessities until too late? Have you ever heard some say, "I wish I had your opportunities to again go over the fundamental principles that I now find so important to know." These same people will tell you also that the lack of the knowledge that you will receive in the first years of your study prevents them from advancing as they would like.

Why is it that it requires so much effort to convince young men that the greater the thoroughness of preparation is in the end best for them in the practice of medicine? They say nothing if a year is added to the law course or science or divinity, but medicine! That must remain as of yore.

The answer given by a doctor a few days ago may afford us some light. It was in a court of law in this city, in a suit for damages; he, I think, was a witness for the plaintiff; he was asked where he had graduated. He said that he had never graduated; he had heard one or two lectures by Dr. Thomas Opie, but never thought it necessary to graduate. "I am a born doctor."

Are any of you born doctors? Born doctors have never done anything for their fellow mortals or advanced medicine one particle. Born doctors have kept medicine shackled with the chains of ignorance for centuries and even at the present day effects of it can be seen. Catch cold, let it irritate your larynx until you cough sufficiently frequently to attract the attention of everyone. Your friends will diagnose your case as far off as they can see you and will have ready an unfailling cure and will urge you to drop all other remedies and procure his.

Now, in the very early days of medicine, about the time of the Babylonians, it was customary to expose the sick in the public place for people to prescribe for them. The difference between then and now is that then the sick one or his friends would appeal to the passers-by

for medical aid, while now medical aid is thrust upon you and the prescribers become incensed if not taken by the victim. Personal experience is the great force with these born doctors. This thing of being a born doctor is all "rot."

Years and years ago, about 450 B. C., the great Hippocrates said: "Six things are required to constitute a physician. Natural talents, a good education, a competent instructor, early study, industry and adequate time." Surely if such advice was sound then, it is the more so now.

The past thirty years have brought about great changes in medicine. The work of Pasteur, Lister, Koch and Roux have increased the powers and broadened the knowledge of physicians to that degree that the young men cannot become educated practitioners in the time formerly required. It is upon such as you that the future of medicine depends. We yet see "as through a glass darkly" and it is for you and your successors to clear the vision.

Do you suppose that such giants that I have just mentioned were accidental productions, that they made their discoveries and their conclusions by intuition? By no means. They began as you are now, knowing nothing. Facts were given them by their instructors year by year as they became fitted to receive them.

They did not "reach out" for the dish that was beyond them, but contented themselves by taking time to digest those things with which they had already been served, which finally brought the new dish to them. The association with your preceptors at home, the occasional work that has been allotted to you by them, has possibly made you restless to begin on your own account the practical part of medicine.

Overcome, I beg of you, this desire, be content to wait for the dishes to be brought to you, do not reach out. Work earnestly at the subjects assigned you for your year of study. Master them and I can safely promise you that your work will be easier, will be more thorough, will make you better practitioners.

Do I expect you to be such leaders as Pasteur, Lister and others? No. But I do expect you to prepare yourselves to be able to appreciate the work of such men, to cheer them on by your intelligent support and criticism.

Think of it. The advance of medicine is not entirely dependent upon the leaders. The average intelligence and knowledge of the mass of practitioners is equally necessary so that the truths discovered might rapidly be put to the good of humanity and not allowed to lie

dormant like that truth given forth by our own Holmes, respecting puerperal fever, which was forgotten for nearly forty years, but is now accepted by all.

You all desire to be practical physicians; see to it that you prepare yourselves to put into practice such truths and then the goal that you desire to reach will all the easier be attained, your efforts will raise the average of the profession and that will lead to greater advancement in the relief of the ills of humanity.

A REVIEW OF THE AUTHOR'S METHOD OF ANCHORING THE KIDNEY.

READ BEFORE THE OHIO STATE MEDICAL SOCIETY.

By *R. Harvey Reed, M. D.*,
Columbus, Ohio.

Professor of the Principles and Practice of Surgery and Clinical Surgery, Ohio Medical University.

THE frequency with which surgeons meet both floating and movable kidney has long since attracted attention as to the best method of anchoring this organ so as to preserve its normal functions. The multitude of complex disturbances and reflex symptoms associated with a floating or movable kidney are such that the surgeon is constantly called upon to render relief. These abnormal conditions may last for years without serious results, yet they are liable to give rise to degenerative changes which may necessitate a nephrectomy or a nephrotomy at any moment. Palliative treatment, by means of rest and bandaging, as a rule, avails but little. The difficulty of holding a kidney in place with a bandage is such that little reliance can be placed on this method of treatment.

From the fact that this abnormal condition is chiefly a source of annoyance rather than danger, patients hesitate in submitting to an operation for the purpose of anchoring the kidney, as it seems to them like a very large undertaking for the purpose of accomplishing very small results. It is hard to make them understand the importance of having

the kidney anchored and the danger that is likely to arise from neglect of the proper surgical treatment. At the same time we can hardly blame them or their family physician for not urging an operation which requires a large oblique gash through the lumbar muscles and a number of buried sutures which are difficult to insert. Only those who have attempted to perform this operation can appreciate how hard it is to hold the kidney in place by the old-fashioned method until it is sutured to the deep muscles of the back. The difficulty of this procedure stimulated me to devise a new operation which had for its object simplicity, rapidity and efficiency.

Referring to a paper read before the Columbus Academy of Medicine, November 19, 1894, on "A New Method of Anchoring the Kidney," published in the *Columbus Medical Journal*, December 25, 1894, you will find that my operation consists "in making the ordinary perpendicular abdominal incision over the median line of the kidney. As a rule, it need not exceed two and a half inches in length, depending largely on the thickness of the abdominal walls. Having made the incision sufficiently

large to get the fingers in and bring the kidney to its normal place, I then use a long needle which I have had made on purpose, seven inches in length. Two of these needles are threaded with aseptic silkworm gut or aseptic silk, using but one ligature. Having placed the kidney in its normal position (and in the case of a floating kidney scored the peritoneum so as to favor adhesions), I now insert my first needle through the upper and inner part of the cortical substance of the kidney directly through the muscles of the back, bringing it out between the eleventh and twelfth ribs. The second needle, which is on the other end of the ligature, is also passed through in a similar manner, about an inch from its fellow, through the upper and outer cortical substance of the kidney, making, as you will recognize, a staple stitch. These ligatures are tied on the integument of the patient's back by an assistant. If necessary, another suture is inserted in a similar manner through the outer margin of the kidney, the first needle of the second suture being passed about an inch below the last needle of the first suture, and the second needle of the second suture about an inch below the first needle of the second suture, through the cortical substance of the outer portion of the kidney."

You will readily see that this is a very simple operation, does not involve any vital structures and can be performed in a few moments, with little or no danger to the patient, while the results have been even more than anticipated. In explaining the method I had adopted to my friends, I found but practically one criticism and that was a lack of confidence in obtaining satisfactory results. Recognizing the fact that it required several sutures, by the old method, to hold the kidney in place, they did not see how it was possible for one or two sutures to accomplish the same. If you stop to study the difference between the two methods, you will readily observe that the new method "clinches," so to speak, the kidney by a staple suture, while the old method simply sutured the posterior portion to the deep lumbar muscles. The merest tyro will readily

see the mechanical difference between the two sutures. The one not only embraces the entire kidney, but pierces the lumbar muscles and is re-enforced by the integument on the back, while the other simply involves a portion of the friable cortex of the kidney and a small portion of the tenderloin; hence it is quite evident that more sutures would be required by the old method than the new.

Since devising this plan for anchoring the kidney, I have had an opportunity for demonstrating its practical utility in five (the author operated his sixth case at the University Hospital, during the recent meeting of the Ohio State Medical Society, which made a prompt and uneventful recovery, making a total of seven cases with seven recoveries by this method) cases operated by myself and one by my colleague, Dr. Means, with the most satisfactory results in each case. The rapidity with which the operations were done is one of the marked features. It is only necessary to make a very small opening into the abdominal cavity, bring the kidney to its normal position, pierce it with the needles, as above described, tie the sutures over a piece of iodoform gauze on the back and close the abdominal wound. There are seldom any constitutional symptoms following the operation. The patient has little or no pain or rise of temperature, while the pulse remains practically normal. In about ten days the suture can be removed, leaving the kidney entirely free from any foreign substance. I usually have the patient remain quiet from two to three weeks after the operation.

Up to date there has not been a single instance of a return of the disease, so far as I have any knowledge, the patients are all enjoying good health, and are entirely free from the reflex symptoms which were so annoying prior to the operation. In two of these cases it was my fortune to have an opportunity to examine the result; in one case several months afterwards and the other nearly two years. In each case the patient had to be operated for ovarian trouble, and in each I made a careful examination of the kidney which had been anchored

and found it firmly fixed and, so far as I was able to judge, in a perfectly healthy condition.

I do not claim that the few cases which I have reported are sufficient to establish the fact that this method is without fault, but I do claim that up to date the results secured are better than those usually obtained by other methods.

Society Reports.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

REPORTED FOR THE MARYLAND MEDICAL JOURNAL.

Dr. J. Frank of Chicago read a paper on the subject of A NEW METHOD OF FASTENING THE ROUND LIGAMENT IN ALEXANDER'S OPERATION, WITH LITTLE DISTURBANCE OF ITS ANATOMICAL RELATIONS. An incision an inch long is made midway between the anterior superior spine of the ilium and the spine of the pubes, a trifle above Poupart's ligament. The transversalis muscle is pushed back and the ligament lifted out with a blunt hook, such as I here show you. Draw it out until the uterus is in the correct position. No great difficulty is experienced if the peritoneal cavity should be opened. Usually three sutures are required to close the wound; the first one being taken as low as possible through one flap of the peritoneum, then through the round ligament itself. Instead of drawing the ligament through the fascia as formerly practiced, it is replaced in its anatomical position beneath the transversalis muscle. By this method a slough of the ligament is prevented. This operation is the simplest of all yet proposed for the purpose. As a suture material, kangaroo tendon has proven most satisfactory in my experience. A pessary should be fitted in before the operation and worn as long as may be deemed necessary by the surgeon, afterwards.

Dr. A. Ochsner of Chicago: *Dr. Frank* devised this method seven years ago. I consider it a great improvement in this operation because it does

away with tearing and injuring the tissues. His method leaves the organ in the best possible condition for recovery, with sufficient adhesions to protect the ligament from being drawn out again; yet without unnecessary adhesions. I have examined some of the author's cases and can confirm his favorable report.

Dr. J. Homer Coulter of Chicago read a paper on TONSILLOTOMY BY CAUTERY DISSECTION.

No subject in surgery or medicine has been much more prolific in interest and discussion than that of the tonsil. In the past ten years over 600 papers have been written on that subject alone. The size of the normal tonsil is still a subject of discussion with throat specialists. Some claim there is normally no tonsil to be seen; however, the most usual opinion is that there exists normally a collection of follicles between the pillars of the fauces protruding slightly above them. The tonsil is an almond-shaped gland larger at one end than the other and somewhat flattened.

The methods usually employed for its ablation are the guillotine, igni-puncture, the cold or cautery snare, or the knife. Each of these methods have practical objections to their use. Most important of these objections and one which applies to all of them is the fact that by no one of them can the gland be taken out. Unless this is done the part remaining will oftentimes produce as much trouble as did the former condition. The operation I propose obviates this objection entirely if properly performed.

With a well-heated small electrode the pillars are dissected away from the tonsil to one-half its extent. The gland is then, with suitable forceps, drawn well out and thoroughly and entirely dissected out to about one-half its extent. This portion is then cut off and the surface treated with a strong solution of silver nitrate. In a week or ten days the other portion of the tonsil is removed in the same manner. This operation will give cosmetic as well as practical results unobtainable by any other process yet suggested.

Dr. H. W. Loeb of St. Louis: I have been very much interested in the presentation of this new method of tonsillotomy. I believe most decidedly in what the doctor has said about the lack of skill of many who attempt to remove the tonsils by the ordinary method. Very often they will take a piece off and by showing that to the patient or his friends, they imagine he has performed tonsillotomy. If the operator could see that patient five or six years later suffering from the same affections to which the remainder of the tonsil becomes subject, I think he would not be so well pleased. Removing a part can only improve the symptoms then present, and does not signify that the tonsil will remain quiescent. It is unfortunate so valuable a method is not applicable to young children; in adults I do not think it can be improved upon. I have been practicing this method with some modification for some years. Instead of performing so much dissection it has been my plan to remove so much of the tissue as I could get in an electric snare. This is repeated as often as may be necessary to remove all the glandular substance. I think the method causes less soreness and less pain than that of Dr. Coulter and in many cases, particularly children, the results will be just as satisfactory. Furthermore, my method is applicable in case of young children.

This method of dissection is one that must commend itself in a great number of cases as being the very best possible. I most heartily agree with the author that removal of the whole tonsil is an absolute requisite if you wish to cure your patient. As to the voice changes suggested by some, I believe ablation of the tonsil does have a decided effect on the voice register, but I also believe it is always in the way of improvement. I also desire to state my disbelief in the uric acid diathesis having anything to do with tonsillitis, further than as a concomitant condition. I shall certainly provide myself with the special instruments used by Dr. Coulter and further investigate the operation. When in Chicago I had the opportunity of seeing some of these cases, and I must

say for cosmetic results I have never seen the equal.

Dr. W. J. Mayo of Rochester, Minn., read a paper on THE SURGICAL TREATMENT OF PYLORIC OBSTRUCTION.

This subject has not received the attention it demands from American surgeons. The differential diagnosis of serious pyloric disease is often a matter of the greatest difficulty. I have found the free exhibition of strychnia for several days previous to the operation of great value in preventing shock. The stomach should always be thoroughly washed out a few hours before the operation and nothing eaten afterwards. For combating the shock, besides strychnia and dry heat, a rectal enema of a pint of hot coffee should be given. Nourishment by the stomach should not be too long withheld afterwards. For twenty-four hours rectal alimentation should be used; in thirty-six hours some champagne, later buttermilk and a gradually increasing diet.

Dr. A. F. House of Cleveland opposed the use of the Murphy button and did not consider it the ideal method, as his experience had been somewhat unsatisfactory. I believe the less foreign matter one gets in the wound in uniting the bowel to the stomach, the better the result. I have discarded the button for the suture method. I believe much of the success in the use of the button depends on the skillful technique in using it. Perhaps I do not possess this skill.

Dr. F. F. Lawrence of Columbus: In case of malignant disease we cannot promise more than temporary relief and perhaps prolongation of life for a brief period. The simpler the operation the better for the patient. I doubt very much if resection in case of malignancy will give a permanent cure.

Dr. A. J. Ochsner: I should like to take away some of the good impressions the author has left regarding the hydrochloric acid test. I am convinced it is a most treacherous test. In suspected carcinoma the best thing to do is to make a colostomy. In some twenty cases I have used irrigation of the stomach with decided satisfaction. In this way the patient will sometimes become

well enough nourished to better stand an operation when it is desirable.

Dr. Thos. H. Manley of New York read a paper on CONDITIONS WHICH MAY SIMULATE ORGANIC OBSTRUCTION OF THE RECTUM.

The author gave an extended, most interesting and practical paper. Putting new life and interest into the somewhat hackneyed, though none the less valuable, subject of constipation.

Dr. I. N. Love, in discussing the paper of Dr. Manley, said: "There can be no question that a majority of the diseases which afflict human beings, male or female, are largely dependent upon constipation, and consequently upon obstruction of the rectum. We are all of the opinion that a large part of the diseases of women are due to that factor. Their habits of life, their social, domestic and maternal duties, seriously interfere with that regularity which is so essential. Every individual should be anxious to properly cleanse the sewerage system of the body. The pelvis of a woman should be left to be occupied by the proper pelvic organs. A fecal accumulation is a mechanical obstruction pressing these organs out of position. I am thoroughly in sympathy with the position taken by Dr. Manley, and we, as physicians, should impress the mothers and young ladies in their homes that it is not only unsafe, but unesthetic and inartistic, to retain these accumulations that should have a place in the sewers of the city. They should be made to realize that the alimentary canal is a food tract in its entirety and that waste material should be removed from the bowels. There should be no necessity for cathartics or purgatives. Happy living, right living, successful living, depends quite as much on proper elimination as anything else.

Dr. Norval H. Pierce of Chicago read a paper on SUBMUCOUS LINEAR CAUTERIZATION; A NEW METHOD FOR REDUCTION OF HYPERTROPHIES OF THE CONCHAE.

The author called attention to the various methods ordinarily used for the reduction of such hypertrophies, and showed the disadvantages of such. The

differentiation between hypertrophy and turgescence was pointed out. The operation proposed by the author was as follows: A small incision is made in the hypertrophied membrane, then with a blunt, flat probe the mucous membrane is carefully separated from the erectile tissue underneath. Then a sound, the end of which is cup-shaped, and upon which has been fused a few crystals of chromic acid, is inserted in the incision and the tract already made by the probe is thus cauterized. The advantages of this method are that there is no hemorrhage. It is less painful than by any other method. The functional activity of the mucous membrane is not in the least impaired. Patients will submit to this operation more willingly than to the burning of the cautery. The method is the most simple of any yet suggested. The reaction is usually insignificant. There is no slough. The danger of atresia is obviated.

Dr. Coulter complimented the author on the originality of his method and its various points of excellence, at least theoretically present. The main object to be attained is not only the redemption of hypertrophy, but as well the retention of function activity. Many operators in using the cautery destroy too much of the mucous membrane and do not go deep enough to remove or destroy any practical amount of the tissue underneath, which in reality is the pathological condition present. He suggested the possibility of the chromic acid being left within the operative field, in which case an undesirable slough would necessarily follow. The practice of many rhinologists in using a broad, flat electrode, and destroying a large amount of the mucous membrane, and in not going down to the bone, is to be deplored, as irrational, unscientific and impracticable. Inasmuch as by such measures they do not cure the hypertrophy, but do very materially reduce the functional capacity of the nasal mucous membrane.

Dr. W. L. Ballenger of Chicago: You who have used this cautery must have learned to use it with more caution than you once did. The rationale of Dr. Pierce's operations is certainly an ideal

one. If the hypertrophy can be removed without the destruction of any mucous membrane, little more is to be desired.

Dr. H. W. Loeb of St. Louis: It seems to me this operation is a thoroughly scientific one, if we can thus preserve the mucous membrane and its function. It occurs to me that antiseptics and asepsis would both be a necessity with this method. I would ask why we could not use a platinum wire properly made and introduced in the same manner. I have seen blindness result from cauterization of the inferior turbinates; is there danger in the use of the chromic acid by this method?

Dr. Stuckey: We must determine whether it is an hypertrophy or simply a turgescence. If the latter, it may be simply an acute condition caused by some idiosyncrasy. If a true hypertrophy, this method would seem to be an excellent one, requiring, however, a considerable amount of technical skill. I am becoming more and more skeptical in the use of cocaine in the nose. There is the greatest danger of producing cocaine habitués by its use. I am able to get the same results without danger and less systemic disturbance by the use of a harmless solution of acetanilid.

Dr. Muir of New York: In reference to the question of Dr. Loeb I can say in our hospital in New York we have tried the submucous cauterization with the cautery wire, but in each and every case an undesirable slough was produced.

Dr. Love: Chromic acid needs to be used very carefully. It is very penetrating and must be controlled, but when controlled it is one of the kindest cauterics we have. It produces an eschar that clings closely to the bone. The idea of the author that the nutrition of the hypertrophy must be cut off is a most scientific and practical one. I wish to enter my protest against the indiscriminate and careless use of cocaine in the nose. There are going about the country today hundreds of men and women, miserable victims of the medical profession's careless use of cocaine.

Dr. Horace H. Grant of Louisville

delivered the address on surgery. He selected for his subject THE RELATIONSHIP OF DIAGNOSIS TO THE FUTURE SURGICAL PROGRESS. Some common ground must be chosen on which we can equalize our differences. Many of the most recent operations are already passing away under the effect of our modern scrutinizing investigation. We forget there are men in the quiet of their laboratories doing a work which makes all our wonderful progress possible and gives us these new methods. We cannot progress much farther in technique or operative skill. Any great amount of paraphernalia suggests a lack of personal resources in the operator. Almost any part and organ of the human body has been removed, recently, with more or less good to the patient. If we would make earlier and more careful diagnoses many of the possible failures would be precluded. No surgeon dare say to the patient, "If I had known yesterday or before, thus and so, the result would have been different." Are we not at fault sometimes ourselves? Rarely will we fail to secure an operation if the operator is certain of his diagnosis and demands the operation.

No term in all surgery is so often misapplied as conservatism. No aim is dearer to the surgeon than the ways and means of relieving his patient. We must not fall into the error of making one man great and another insignificant. The experience which age gives some men leads them to make valuable and correct diagnoses. Experience is and should be one of the greatest aids in diagnosis.

The skiagraph has lately come into importance in surgical work and it may be made an excellent adjunct in many instances. Its recent successes are noteworthy. It is yet, however, in its infancy and doubtless is capable of still more development. May we not soon expect to see the fetus in utero? No one doorway can open the royal road to success in the practice of surgery. The skillful and intelligent application of prompt relief, added to a careful diagnosis, will give us the most wonderful and satisfactory results.

What each one finds to do, let him do it with his might.

An unanimous vote of thanks was extended to Dr. Grant for his scholarly and interesting address.

Dr. Jas. H. Dunn of Minneapolis read a paper on APPENDICITIS ; TO OPERATE OR NOT TO OPERATE. If we could but foretell which of our cases were going to be fatal, we could much more easily and satisfactorily decide this question. The percentage of fatality is yet too high. Yet must we cease operating because of such fact? A certain number of these cases will recover without surgical interference. Indeed, there is so large a number of such that I believe we very often, in our enthusiasm, operate when it would have been much better to have left them alone, so far as the knife was concerned.

Dr. J. B. Murphy of Chicago: The surgeon is brought face to face with a condition which has a recognized mortality of about 5 to 8 per cent. I think such a percentage is too high. We first have to contend with the presence or absence of suppuration. In 450 cases I do not think there has been an entire absence of pus in one single instance. I am satisfied there are some cases which can be cured by medicine, but can they be differentiated? By medical treatment we have a mortality of 10 per cent. and if we have 3 per cent. by the knife, then we must operate to save the other 7 per cent. I do not think every case can be operated upon, but the conditions will show whether or not it is advisable.

Dr. Gustave Futterer of Chicago read a paper on PLEURITIC EFFUSIONS AND THEIR TREATMENT. A bacteriological examination should be made in all cases; both with cover-glasses, with culture media and by injections of the effusion in animals. Distinguish between exudate and transudate by using the acetic acid chemical test; and by the same process eliminate mucine. Many cases of pleurisy are of an uric acid diathesis. These will yield readily to the treatment by the salicylates. I believe not more than 15 per cent. of pleuritic cases are rheumatic. The finding of pneumococci does not aggravate the conditions

and often gives no markedly distinct symptoms. Pleurisy in typhoid is not a mixed infection, but a distinct condition. Tubercle bacilli are often found in the pleuritic effusions. I believe it is not only possible, but likely, that the tubercle bacilli do penetrate through the alveolar septa and enter the pleura without producing infection in the lungs. Tuberculosis may be differentiated by the agar culture. Hyperesthesia of different parts is frequently present.

I have washed out the cavity in fourteen cases with an antiseptic solution of one-half to two per cent. of clove oil, with most gratifying results in twelve of the cases. The advantages of this method are: Many patients will allow such an operation, who would object to an excision of the rib; no bulky dressings are constantly interfering with the comfort and convenience of both patient and physician; much shorter time is required.

Drs. Larrabee, Daley, Turck and Patrick participated in the brief discussion which followed.

Dr. A. J. Ochsner of Chicago read a paper on NERVE SUTURES AND OTHER OPERATIONS FOR INJURIES TO THE NERVES OF THE UPPER EXTREMITY. My own observations and a study of the literature lead me to a confirmation of the following conclusions:

1. Every severed nerve should be sutured even after years.
2. The earlier the operation is performed the better.
3. If neither sensation nor motion is established within a year, the nerve should again be exposed, the cicatricial tissue removed and the end again sutured.
4. The end should be clean cut, should contain neither crushed tissue nor cicatricial tissue.
5. Tension must be avoided.
6. The wound must heal without suppuration to secure the best results.
7. Hemorrhage should be perfectly controlled to prevent intervening clot.
8. Carefully prepared catgut is the best suture material.
9. After suturing the ends either direct or "a distance" it is well to stitch

a fold of fascia over the united nerve ends.

10. The extremity should be placed at rest.

11. The external incision should be ample.

Dr. Henry P. Newman of Chicago read a paper on WOMAN AND HER DISEASES, VERSUS GYNECOLOGY. We are coming to a period of transition in the practice of surgical studies on the cure and prevention. Preventive medicine, hygiene, sanitation and sociology are now popular themes for medical societies. Philanthropy has taken the cue from medicine and is attempting to form a citizen rather than reform him. I wish to emphasize the fact that we are not dealing with the cold science side of our art, but with the highest of humane interests. The amount of ignorance in the average woman of nature's requirements is appalling. Woman's sphere has lately widened until now it is as wide as man's. Has she equipped herself for this race intelligently? Look at the average woman in the cities; the average stenographer, saleswoman, the business woman, do they not daily outrage their bodies by compliance with the dictates of fashion in food, dress and habits?

The tendency of gynecologists to enter surgery is to be deprecated. It narrows his opportunities. He had better stay attached to obstetrics and pediatrics. A woman's generative organs should not be doomed because she has needed to visit the gynecologist. A good diagnostician must know as much about women as about disease; as much about environment and social and domestic relations as about pelvic lesions.

As specialists we must recognize and exercise the important interests in a medical science which will prevent, rather than cure, disease. As we know what can be acquired may be prevented, hence we as specialists should lead in the reform of those conditions which are detrimental to the health of woman.

Dr. F. F. Lawrence read a paper on THE PATHOLOGY AND TREATMENT OF SUPPURATIVE SALPINGITIS.

The tubal mucosa is a true mucous

membrane, possessed of all the histological elements of mucous membrane. The fimbriae are prolongations of the folds of mucous membrane, with a few muscular fibers beyond the end of the tube.

The closure of the end of the tube is effected by—first, the unfolding of these plicae and the elongation of the muscular fibers with coincident inflammatory exudate and not by adhesions of the peritoneal surface. Second, the formation of adhesions between the fimbriae and other structures. Third, embedding of the fimbriae in inflammatory exudate.

The closure of tubal ostia results in forming of circumscribed abscess, the pathology of which is the same as that of suppuration with abscess formations in mucous membrane in other parts of the body, except for its effect upon important contiguous tissues. Occasionally the uterine end of the tube communicating with the uterine cavity, through which it may in part discharge its contents.

Treatment.—The treatment of pus tubes cannot be fixed by any iron-clad rule. Each case must be treated according to the conditions there presented. We must even incise and drain in some cases. Seldom will vaginal section be required, and only in carefully selected cases. Hysterectomy is indicated in those cases where we find abscess of the uterine wall, tuberculous deposits, fibroids, or malignant disease in the fundus. As hysterectomy destroys the pelvic floor it should never be performed except where there is some tangible lesion of the uterus. Abnormal section will be necessary in many cases.

Dr. James B. Herrick, Chicago, read a paper on THE IMPORTANCE OF PHYSICAL SIGNS OTHER THAN MURMUR IN THE DIAGNOSIS OF VALVULAR DISEASE OF THE HEART.

Standard text-books teach that an endocardial murmur is not always an evidence of a valvular lesion and also that a valvular defect may exist and still no murmur be present. Practically, however, conclusions are usually based upon the presence or absence of

murmur. This is wrong, for there may be a valvular disease without a distinct murmur being audible. Other findings than murmur must be used in determining the existence of a valvular lesion. Every valvular lesion must result in hypertrophy and dilatation of the heart behind the valve diseased. An increase in tension of the pulmonary circulation follows any valvular lesion at the mitral orifice, and later any aortic disease. This will show in increased force of the pulmonic second tone.

Stenosis of the orifices of the left heart means a smaller amount of blood in the general arterial circulation, therefore, lessened arterial tension.

Failure of the right heart is followed by venous congestion, *e. g.*, venous pulse, hepatic and portal congestion, anasarca, etc.

Hypertrophy may be recognized by the heaving, forcible apex impulse. Epigastric pulsation may call attention to enlarged right heart. The jugular pulse, the hepatic and capillary pulse are all of diagnostic value. The visible pulse of aortic regurgitation is almost pathognomonic.

Palpation is important. Extra-cardiac causes for murmur, such as might arise in a heart dislocated by pressure or retraction, can usually be excluded by percussion.

A weak aortic sound may be an indication of obstruction. The reduplicated second sound may point to valvular disease. A sharply accentuated first sound at the apex is common in mitral stenosis. The peripheral tones in aortic regurgitation are an exceedingly valuable confirmation.

Cases illustrating the foregoing were referred to.

Error in calling an inorganic murmur organic is readily made unless the secondary sounds are carefully sought for. The intention of the paper was not to undervalue the importance of endocardial murmur, but to insist that it is only by the complexus of signs and symptoms that an accurate diagnosis can be made. Of all the evidences of heart disease, the least valuable is the endocardial murmur.

Medical Progress.

PRIMITIVE OBSTETRICS.—Dr. Howard A. Kelly, in quoting from an address of the late Dr. Edward R. May of Wilkes-barre, Pa., says that Dr. May had never seen or owned an obstetric forceps, but that when he had a case on which one would have ordinarily used forceps, he incised the fetal scalp with scissors, inserted the index finger between it and the calvarium and extracted the child. Many baldheaded citizens of that region carry cicatrices as a memento of this primitive obstetrical method.

* *

THE RESPONSIBILITY OF TREATMENT BY HYPODERMIC INJECTIONS.—An inquiry was held by the coroner at Birmingham, as recorded in the *Lancet*, relating to the death of a patient at the workhouse infirmary. The evidence showed that a man aged thirty-nine was admitted with acute bronchitis and an affection of the heart. The visiting physician, Dr. Short, ordered a hypodermic injection night and morning of a solution of strychnine. The nurse in charge sent hurriedly for the resident surgeon on the evening of the 18th, saying that she had by mistake given the patient an injection of five drops of a morphia solution equal to half a grain. Notwithstanding all remedies used the man died some two hours afterwards. The nurse stated that she had given twelve injections of the strychnine previously at the required times. The morphia and strychnine bottles were both alike in style and color and form of label. The cupboard, which contained about forty such bottles, had been cleared out on the previous day, and the bottles she supposed must have become disarranged. The jury returned a verdict of "Death from misadventure," and recommended that all poisonous subcutaneous injections should be given under the superintendence of the resident medical officers, and that the medical officers should exercise such supervision as to render it impossible for the nurse to obtain or administer any injection other than that prescribed for the patient.

MARYLAND

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MARYLAND MEDICAL JOURNAL,
209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:
913 F Street, N. W.

BALTIMORE, OCTOBER 17, 1896.

It is no easy matter to change opinions once formed and remove prejudices, especially in a conservative *The Eastern Shore*. part of the country. The Eastern Shore of Maryland has for years been proverbial as the land of all lands where malaria prevailed and where every inhabitant shook with ague in spite of the consumption of quinine and whiskey in no small quantities. This was the state of affairs years ago and those who have not kept up with the times believe that the malarial germ still holds sway east of the Chesapeake Bay.

Statistics have been hard to collect on this subject, but the observations and experience of physicians has gradually forced the truth that malarial disease is passing away from that historic region.

Some years ago Dr. Chancellor, then Secretary to the State Board of Health of Maryland, published articles showing the decrease of malaria, and later a very able paper by Dr. J. C. Clarke, formerly of Federalsburg, but

now assistant at the Maryland Hospital for the Insane, proved conclusively what sanitation had done to drive out this dread scourge.

The latest testimony to the fact that malaria is fast disappearing from most parts of the Eastern Shore is set down in two very attractive articles in the September and October numbers of the *Health Magazine*. The editor of that progressive journal hesitated to write up accounts of any region until he, with a true spirit of enterprise, had himself visited and explored it personally. With his faithful steed of iron and pneumatic tires full of wind he started out to see just what condition of health was to be found in the counties of Maryland east of the bay and to find out whether previous statements were founded on fact or not.

He found not only that natural beauty which has always been characteristic of that "garden spot" of Maryland, but he studied carefully the statistics of sickness and death and came back more than ever convinced that preventive medicine had worked wonders in removing from that fair region the stigma which had rested on it so long.

Malaria is known to flourish in marshy, damp districts, especially where fresh and salt water are mixed and where the water tends to become stagnant. Irrigation, drainage and cultivation of land does more than anything else to raise the standard of health in any community. All throughout this part of Maryland, the *Health Magazine* states, this cultivation has so drained the lands and raised them to a high state of prosperity that malaria has rapidly disappeared.

Also the supply of drinking water has been more carefully selected. Instead of using streams which might and actually do carry in them the organism of malaria, wells have been bored from which pure and wholesome water is obtained. The climate and general contour of this part of the State, which has so much water in its make-up, adds greatly to its beauty and healthfulness and makes it a favorable resort for the seeker after health, as well as the hardy sportsman.

The *Health Magazine* has done a good work in helping to make public the great advantages of the Eastern Shore of Maryland and if the editor of that publication has succeeded in showing what vast resources lie in this part of the State, he has not written in vain.

WHILE the negro is especially immune to some diseases, he seems particularly susceptible to those diseases

Mortality of the Negro. which are more universally prevalent. He is also more affected by environment and other conditions than the white under the same circumstances. This difference is likely due largely to ignorance.

Dr. G. W. Hubbard, in comparing the condition of the negro as a slave and as free at the present time, reviews in the *Medical and Surgical Reporter* truths which are apparent to all observant physicians, especially to those who practice in cities where the negro is an element in the population.

He, in common with many other physicians, has noticed that pulmonary consumption was comparatively rare among the slave population and some even maintained that it was unknown as a disease in that race, but from about the year 1855 up to the present time, this disease has made greater and greater inroads into that race until it seems almost a wonder that so many still live.

According to the census of the large southern cities the mortality from consumption among the blacks was from 50 to 100 per cent. higher than in the whites. In Baltimore the returns of the Health Office will show that the blacks have a mortality about double that of the whites. This is probably greater, too, than recorded, for many cases, especially when dying without medical attendance, are not always put down to consumption. Those of pure African descent are less susceptible to this disease than the mixed race.

Of course it is easy to see that ignorance of the proper way of living, unhygienic surroundings, insufficient and improper food and many other causes all tend to bring out pulmonary consumption in those who have the slightest tendency to it and certainly arouse it in those born without a predisposition or inherited taint. It is very evident that this race is kept up by a large birth rate which, as a rule, is unrecorded in the vital statistics.

Hygienists have attempted with little success to show these people how to live and how to avoid disease, but lack of money and often lack of intelligence prevent a practical application of any sanitary rules. It would be hard to convince anyone visiting such a city as Washington, for example, that the

negro race is dying out, but that death plays havoc with the poor of this race is well known to all.

Probably on the principle of the survival of the fittest, the hardiest of them will live and procreate; but until their intelligence reaches a higher grade and until the sanitary police have more power, this high rate of mortality will affect this race and also indirectly the white race.

When a disease like pulmonary consumption slowly eats its way into any body of persons the process is so gradual that no alarm is felt and steps for checking the disease are not taken or are not heeded. But let a great epidemic come along and sweep away many in a short space of time and then sanitation will have full sway.

An epidemic of a fatal disease does more for the cause of hygiene than a disease which is always with us and is familiar to us in all its details. A cholera scare is not without its advantages.

THE finding of the Klebs-Loeffler bacillus in normal throats and noses has markedly affected the statistics

Diphtheria Organisms in Healthy Persons. in a way not usually appreciated. Dr. H.

W. Gross found, in the Children's Hospital of Boston, and records in the *University Medical Magazine*, that in 314 normal throats 7.9 per cent. contained the bacillus of diphtheria and the average existence of the organism in the mucous membrane was fifteen days; the shortest time was one day and the longest time over three months.

The nose was the principal habitat in 65 per cent. and the throat in 35 per cent. These experiments seem to show that diphtheria bacilli, both virulent and non-virulent, are present in an unfortunately large percentage of apparently unaffected nasal and pharyngeal mucous membranes.

It is easy to see that if all cases in which the diphtheria organism is found are treated with the antitoxine and are recorded as cases prevented, when it is not known whether they, if left untreated, would have contracted the disease or not, the general statistics of cures will be greatly favored. Such cases recorded by Dr. Gross should be especially classified.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending October 10, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		4
Phthisis Pulmonalis.....		17
Measles.....		
Whooping Cough.....	1	2
Pseudo-membranous Croup and Diphtheria. }	1	4
Mumps.....		
Scarlet fever.....	10	1
Varioloid.....		
Varicella.....		
Typhoid fever.....	12	9

Dr. J. Franklin Woodward has moved from Richmond to Norfolk, Virginia.

The 75th birthday of Professor Rudolph Virchow was celebrated in Berlin last Tuesday, October 13.

The Journal of Physical Chemistry is the name of a new journal which is published at Cornell University.

The improvements and additions to St. Joseph's Hospital of Baltimore are already well under way and will add greatly to the facilities of that institution.

Dr. A. C. Patterson, confidential financial clerk to Dr. W. W. Godding, Superintendent of St. Elizabeth Hospital for the Insane, the government hospital near Washington, is said to have been found short in his accounts.

The Visiting Nurses' Association held a meeting last week and reported that 2056 house to house visits had been made since the first of the year. This is a deserving charity of Baltimore supported by private contributions.

The statue of Thorwaldsen's "Christ, the Divine Healer," the gift of Mr. W. W. Spence of Baltimore to the Johns Hopkins Hospital, was unveiled with appropriate ceremonies last Wednesday afternoon in the rotunda of the hospital.

Dr. B. Mead Bolton, who was formerly connected with the pathological department of the Johns Hopkins Hospital and who is now bacteriologist to the Philadelphia Board of Health, has been recently appointed instruc-

tor in bacteriology and pathology in the University of Missouri at Columbia.

There are forty-two new students enrolled in the medical department of the Johns Hopkins University. Of these, about ten are women. The total number of students in the four years since the opening of the medical school is 126.

At the last meeting of the State Board of Health of Maryland, at which the new secretary, Dr. John S. Fulton, began his duties, the main work was directed to the cleaning up of the small towns of the State. Notices of nuisances have been served and impure water has been detected in many places.

The medical clinics at the Johns Hopkins Hospital, which are held by Dr. William Osler in the amphitheater on Wednesdays at 12 noon, are open to members of the profession. During the early part of the session the subjects of typhoid fever and malaria will be discussed and illustrated by cases from the wards.

The School Board Committee on Health of the City Council of Baltimore has directed the principals of the public schools to attend to the testing of the pupils' eyes early in the session. Pupils with defective vision will be given a note to their parents or guardians calling attention to the defect and requesting an examination by an oculist.

At the recent meeting of the American Dermatological Association the following officers were elected for the ensuing year: Dr. James C. White, President; Dr. Louis A. Duhring, Vice-President; Dr. John T. Bowen, Secretary and Treasurer. The next meeting will be held in Washington, D. C., in connection with the Congress of American Physicians and Surgeons.

The Johns Hopkins Hospital Training School for Nurses has lengthened its course to three years. A maternité ward and a children's ward will be opened this year. The former will have 30 beds and the latter about 18. There are 64 pupils in the training school and 14 graduate nurses. It is also stated that the nurses now work eight hours at a time instead of twelve as formerly. The American Association of the Superintendents of Training Schools, of which Miss Nutting of the Hopkins Training School is president, will meet in Baltimore in February.

Book Reviews.

A MANUAL OF OBSTETRICS. By W. A. Newman Doland, A. M., M. D., Assistant Demonstrator of Obstetrics, University of Pennsylvania, Instructor in Gynecology in the Philadelphia Polyclinic, etc. With 163 illustrations in the text and 6 full page plates. Philadelphia: W. B. Saunders. 1896.

Students who, through lack of time or disinclination to study, consider Lusk or the other standard text-books on obstetrics too voluminous, will find in this volume a very good substitute, without the details and references of the larger books. The work in most respects is a very good one.

We should not advise, as does the author, the employment of the vaginal douche at the conclusion of labor; as we believe that the parturient woman should be considered as a *noli me tangere* after the conclusion of the second stage of labor, unless some perfectly definite indication for interference arises. And we are confident that its routine employment in the vast majority of cases will do more harm than good.

We would also condemn the employment of a pad above the fundus uteri and the abdominal binder during the first week or ten days of the puerperium; as we are confident that not a few cases of retroflexion are the result of the practice.

The importance given to the consideration of the question of disinfection of the accoucheur and the patient cannot be too highly commended.

We note that the author, in discussing the diseases of the placenta, refers to "chronic tubercular placentitis or phthisical placenta."

It is not apparent from the text whether he is referring to tuberculosis, or to one of the many varying conditions which the older writers designated by this term. If he refers to tuberculosis, it would appear from the text that it is not of infrequent occurrence; while in reality it is extremely rare, only three or four well authenticated cases having been reported. While the old term of phthisical placenta should be relegated to oblivion, as it gives no conception of any definite pathological condition.

We also note that no mention is made of the employment of the anti-streptococcus serum of Marmorek in the treatment of puerperal septicemia.

Current Editorial Comment.

SUPERFLUOUS SCHOOLS.

Cleveland Journal of Medicine.

THE medical profession realizes plainly that the average income of physicians would not be so low if there were not so many schools, dispensaries and hospitals giving free treatment to many patients well able to pay. Worse than that, these institutions actually bid for more cases so as to have greater attractions for students. The evil is not in having too much clinical material for our medical students, for they need much, but in scattering the teaching work in too many institutions, thereby multiplying many fold the number of cases needed for instruction, as well as half-educating twice too many physicians.

PURE WATER SUPPLY.

Lancet.

NO MATTER how irreproachably pure a water supply may appear to be, yet the continual passage of a large volume of it through a reservoir will invariably result in the deposition of more or less slime on the walls of the tank. This is due principally to the growth of algae and other probably harmless vegetable matter. Indeed, this slime is accorded by bacteriologists certain actively virtuous qualities, not the least important of which is that of entangling microbes in its slimy interior. But it is in consequence of this very fact that the slime is found after a time to teem with organisms.

THE KNEIPP CRANKS.

Medical Record.

IF the present frightful death rate of the diseases claimed to be curable by this method can in any way be lowered, why not give these wonder workers an opportunity to be seen and heard? That would appear to be the only way out of the present difficulty of finally settling the now momentous question. The mission becomingly borrows an odor of sanctity from the head and front of its humble and modest projector. Faithful disciples, let your light shine by all means, and when the figurative bushel is thrown away with the shoe may you, while knuckling to this work, continue to glisten with the cleansing invigoration of the morning dew and blend your unconfined exhalations with the grassy scent of breezy lawns.

Publishers' Department.

PHARMACEUTICAL.

COMMUNICATIONS.—All letters intended for the Subscription and Advertising Departments of the Journal should be addressed as below.

ADVERTISEMENTS.—Copy for advertisements should be received not later than Saturday to secure insertion the following week.

PHYSICIANS when writing to advertisers will confer a favor by mentioning this Journal.

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913 F Street, N. W. BALTIMORE, Md.

Convention Calendar.

OCTOBER						
S	M	T	W	T	F	S
..	1	2	3	
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
..

NOVEMBER						
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DECEMBER						
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13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31
..

State Societies.

OCTOBER.

- 13-15. NEW YORK, at New York. E. D. Ferguson
M. D., Secretary, Troy, N. Y.
13-15. Tri-STATE, of Alabama, Georgia and Tennes-
see, at Chattanooga, Tenn. Frank T. Smith,
M. D., Secretary, Chattanooga. J. B. Murfree,
M. D., President, Murfreesboro, Tenn.
15-16. VERMONT, at St. Johnsbury. D. C. Hawley,
M. D., Secretary, Burlington, Vt.

NOVEMBER.

- 10-11. MEDICAL AND CHIRURGICAL FACULTY OF
MARYLAND, at Hagerstown.
27. NEW YORK STATE ASSOCIATION OF RAILWAY
SURGEONS, at New York City. C. B. Henich,
M. D., Secretary, Troy.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOG-
ICAL ASSOCIATION, at Nashville. W. E. B.
Davis, M. D., Secretary, Birmingham, Ala.
16-19. PAN-AMERICAN MEDICAL CONGRESS, at
City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOG-
ICAL ASSOCIATION. Herman E. Pearse,
M. D., Secretary, Kansas City, Mo.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N.
Eutaw St. Meets 2d and 4th Mondays of each
month.
BOOK AND JOURNAL CLUB OF THE FAC-
ULTY. Meets 2d and 4th Wednesdays, 8 P. M.
CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st
and 3d Fridays—October to June—8.30 P. M.
S. K. MERRICK, M. D., President. H. O. REIK,
M. D., Secretary.
GYNECOLOGICAL AND OBSTETRICAL SOCI-
ETY OF BALTIMORE, 847 N. Eutaw St. Meets
2d Tuesday of each month—October to May
(inclusive)—8.30 P. M. W. S. GARDNER, M. D.,
President. J. M. HUNDLEY, M. D., Secretary.
MEDICAL AND SURGICAL SOCIETY OF BAL-
TIMORE, 847 N. Eutaw St. Meets 2d and 4th
Thursdays of each month—October to June—
8.30 P. M. W. S. GARDNER, M. D., President.
CHAS. F. BLAKE, M. D., Corresponding Secre-
tary.

I AM pleased to say that the most excellent preparation "Seng" has given me complete satisfaction. I can sincerely recommend it in all cases where such a delightful as well as efficacious remedy is indicated. It will afford me pleasure to speak of its merits on all suitable occasions.—GEORGE W. BABCOCK, M. D., Chelsea, Mass.

ABOUT eight weeks since, I was called to see a patient of Dr. L's; we found her with excruciating pains in the hepatic region, constant vomiting with distress in stomach, in fact, could keep nothing down for a couple days. Enlarged liver easily felt below the costal margin, very sensitive, so much so that we strongly suspected malignant disease. The symptoms were discouraging decidedly, as the doctor had given her nearly every medicine used in hepatic diseases without relief. I suggested Peacock's Chionia; it was given and she began to improve, and at this date is as well as usual. It certainly was an efficient remedy in her case, and the result deserves recording.—F. W. BATHRICK, M. D., Battle Creek, Mich.

ARGONIN IN THE ACUTE STAGES OF GON-
ORRHEA.—A Preliminary Report. In the Au-
gust issue of the *Journal of Cutaneous and*
Genito-Urinary Diseases, Dr. Geo. K. Swin-
burne of New York relates his clinical ex-
perience with Argonin in the treatment of 51
cases of acute gonorrhea observed in his
service at the Good Samaritan Dispensary.
This drug is a combination of silver with
casein, and is a white powder, which carefully
heated with water over a water bath forms
an opalescent, viscid, albuminous fluid. The
maximum strength of this solution is 10 per
cent.; the reaction is neutral. Of the powder,
fifteen parts contain as much silver as one
part of silver nitrate. A peculiarity of this
compound is that the silver is not precipi-
tated by the addition of sodium chloride, nor
is the compound decomposed by contact with
albuminous substances. According to Jad-
assohn it possesses powerful germicidal prop-
erties; it is not irritating to the mucous mem-
brane of the urethra even in the concentrated
solution, nor is it escharotic; it possesses,
however, no astringent properties.

MARYLAND MEDICAL JOURNAL

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Original Articles.

THE APPENDICITIS CRAZE AND THE GRAPE CURE.

By Irving C. Rosse, M. D.,
Washington, D. C.

AUTUMN again and with it have come back from sea-side and mountain resort fresh faces that sun and wind have blowzed with health. From the physician's view-point such reconstructed individuals stand in striking contrast to the second siftings or randan class of patients so familiar to many of us at this season.

An instance of the class, a clergyman who officiates for a wealthy and fashionable parish, on being recommended by me to try the grape cure, said that in no circumstances could he or his family be induced to eat grapes, so deadly afraid were they of appendicitis. If the reverend gentleman's theology be as faulty as his scientific views, what a dark outlook for the successful repose of the souls of the congregation intrusted to his care.

Nor is it surprising that the influence and guidance of such persons does not prevent members of the flock from going over to the folds of "metaphysical healing" or to the water-cure fad of the Wörishofen priest. It is, however, but fair to say that such deception of eye and mind is not confined to the world outside of medicine. How many of us can recall useless operations for oöphorectomy; and in many cases of fatal appendicitis it is indeed a mooted question whether the patient died as a

result of the operation or in spite of the operation.

As a matter of fact, there is no evidence to show that grapes have anything to do with causing appendicitis. On the contrary, a grape diet is one of the best prophylactics and correctives of the diathesis causing that form of phosphatic deposit in the vermiform appendix erroneously thought to be a grape seed. Late hospital records of nearly a thousand necropsies, in which the appendix was examined, fail to show the presence of a grape seed. Dr. J. B. Thornton of Boston, reporting a case of bowel obstruction where he removed about a quart of grape seed, says, "It is interesting to note how calmly the appendix allowed this mass to sail by its portal without interference." (*Boston Medical and Surgical Journal*, October 1, 1896, page 339.)

During a considerable residence in California and in Southern Europe, where grapes are used extensively both as food and medicine, I never heard of a case of appendicitis.

Grape growers in the neighborhood of the Lakes have allowed their crops to be fed to hogs and to rot on the vines this season, because the appendicitis craze has injured the business. We therefore see the luscious but inoffensive grape, that graces the table and brings to pass

so many delights, banished to the domain of the pig-stye. Could there be a sadder commentary on ignorance in these panic days of dislocated wit and judgment, when so many people are suffering for the want of wholesome food?

A few years ago a correspondent of a British medical journal asked to be informed of any special publication in English on the grape cure. Finding that there was none, and having had more than ordinary experience to observe and study the matter, I wrote several articles explaining the course of regimen that has for its object the amelioration of sundry chronic ailments by the rational and systematic employment of a diet composed exclusively of grapes. The main facts relatively thereto, being pertinent and timely, are none the worse for repetition.

The so-called fruit cures are among the most useful of the applications of bromatology to medicine, and the dietetical use of figs, cherries, greengages, currants, raspberries and of strawberries, has long been in repute with some European physicians. Van Swieten is said to have recommended in special cases the eating of twenty pounds of strawberries a day. He also reports a case of phthisis healed by strawberries, and cites cases in which maniacs regained reason by the exclusive use of cherries as an aliment. Hoffman (Frederick), Richter and Berger report analogous cases.

According to Geoffroy (*Materia Medica*, Paris, 1750, Vol. I, page 52), Forestius has seen inveterate diarrhea, that had resisted all treatment, healed by the sole use of over-ripe medlars. Linnaeus, a great sufferer from gout, thought he removed and lessened its attacks by a fruit regimen. It is within the memory of many persons now living that obstinate cases of bowel diseases among soldiers of the late civil war recovered rapidly on eating peaches. Both dates and raisins have been equally regarded as a comestible and a medicament. But it is to the capital virtue of grapes, which contain nutritive principles necessary to maintain health,

that one must look for the attainment of determinate results.

In many of the works on viticulture and enology, the literature of which consists of something over six hundred volumes, mention is made of the therapeutic use of grapes. The landmarks of the subject may be found as far back as the laws of Moses, one of which permits the eating of "grapes, thy fill at thine own pleasure."

In the time of Nero, a Greek physician, Dioscorides (Pedanius), mentions in his work on *materia medica* the curative virtues of grapes. In the same connection their use is detailed by Pliny with admirable thoroughness. Celsus, Galen, the latter Arabian physicians, and the German references mostly in the tenth century, may also be cited. But few English authors, as Pringle, Cullen and Sir James Clark, refer to the subject, and that only in the most allusive manner.

In fact, English-speaking peoples generally seem to know but little of grapes as a therapeutic means, notwithstanding the late rapid advances of viticulture in the vicinity of Cincinnati, in California, in Australia, and at the Cape of Good Hope. There being no special work on the grape cure in English, it is to German works, and especially those of the last twenty years, that one must turn for methodical instruction regarding the chemical study of grapes and the clinical observation of their effects.

Perhaps the empirical knowledge of the alimental properties of grapes observed in the fattening of certain migratory birds, and the more palatable flesh of young foxes after a grape diet, may have had more to do with the employment of grapes as a medicament than any knowledge deduced from their chemical study. The nutriment afforded by good grapes is typically representative of all the alimentary principles, although they are poor in protein compared with some other foods, the proportion being one to twenty, according to Fresenius, and it requires one pound and a quarter of grapes to yield the equivalent of protein found in one egg.

Much depends, however, on the variety of grape, the soil in which it is grown, and the meteorological conditions under which it ripens. The juice of grapes is looked upon by many chemists as a sort of vegetable milk. A very curious resemblance also has been shown to exist between buttermilk and grape juice. Besides, grapes contain the mineral salts in variable quantity, the proportion depending on the variety of grape and on mesological conditions. All parts of the grape have been well studied chemically. For the sake of brevity it is only necessary to refer the reader to some of the more comprehensive analyses. (See Knauthe (T. H.): *Über Traubenkuren*; Schmidt's *Jahrbücher*, 1873, clvii, 167. Also König (Dr. J.): *Die menschlichen Nahrungs- und Genussmittel*, Berlin, 1880, and a similar work in 1882.)

What was especially observed in regard to grapes in the time of Pliny is the same now as then. Their earliest physiological effect is the promotion of the secretions and of the excretions, without irritation of the intestinal canal, provided the grapes selected are proper for the treatment and there is no contra-indication. The use of sweet and alkaline grapes, by suddenly breaking up all the habits of nutrition, rapidly reconstructing the blood and exercising a salutary action on the nervous system, favors the formation of fat; but if the grapes be watery and sour, or not sufficiently ripe, weight is lost rather than gained.

The continuous consumption of grapes removes tartar from the teeth and may attack the enamel. If the practice be kept up for a long time it may cause stomatitis, or weaken the alimentary organs, and grape sugar may be introduced into the blood and decomposed, or be partly excreted unchanged. Jaundice has been observed to occur in children and dizziness to arise from fulness of the stomach. The dextrine present makes the pancreatic albumen more soluble and further increases the secretion of pepsin. The potash salts, which vary from two to four parts in the thousand, have also been supposed to increase the cardiac activity.

The large proportion of phosphoric acid in Malaga and Hungarian wines may be turned to advantage in the treatment of infantile diarrhea, the wine being dealcoholized by evaporating to one-fourth and sweetened, and of this a tablespoonful may be given. The seeds and skins of grapes acting mechanically may occasionally cause serious intestinal disturbance. The introduction of one of these substances into the vermiform appendage has been of late the subject of much popular concern, but the danger from this cause is, perhaps, no greater than that arising from other articles of food, as apples, etc.

Detailed accounts in regard to the urinary excretion are rather conflicting; some observers saying that its specific gravity is smaller, while others say not; the reaction may be either neutral or acid, the chlorides increased, the uric acid lessened or increased, and the same as regards the urea. There is sometimes a phosphatic deposit and alkalinity of the urine.

Aside from the physiological speculation, it is known that the laxative effect of grapes is superior to the mere purgative mineral waters, for while increasing the excretions they also increase the weight and vigor of the body.

Their use in various intestinal diseases dates as far back as the Roman empire, at which time, according to Pliny, grapes were used, both externally and internally, without the skins or seeds, in diarrhea, dysentery, and even in the chronic dermatoses, gout, etc. In modern times, Tissot, Pringle and Zimmerman speak of their use in dysentery and, indeed, they seem to have been employed and recommended in the most different diseases. But it is more particularly in constipation and in hypochondriasis produced by dry catarrh of the intestines that this fruit acts beneficially by moderately relaxing the bowels and by relatively increasing the secretions.

The grape cure is of great value to persons of irregular digestion, who have deluded themselves into the habit of taking purgatives; and its virtues as a reparative agent are particularly recommended by its partisans in scrofula,

in diseases of the liver or spleen, in hyperemic congestion, in hemorrhoids, in menstrual derangements, in chlorosis and in anemia, particularly that of convalescence. The sequelae of alcoholism, particularly the stomacheic and abdominal troubles, are greatly benefited by the grape regimen, and it has been recommended in chronic diseases of the genito-urinary organs.

The aphrodisiac effect of grapes, which Rhazes in the ninth century formulated "*erectionem augmentat*," may be turned to advantage in the treatment of impotency, if the fruit is taken in large quantity. I have succeeded by this method in breaking up the bromide habit in a case of obstinate insomnia after all other means had failed. (See *Medical Record*, New York, October 10, 1885, page 418.)

Some German physicians consider the grape cure of doubtful efficacy in the uric acid diathesis. Its use is contraindicated in chronic tuberculosis and in hemoptysis, unless the digestion is sound. Foussagrieves, however, attaches great utility to the cure in pulmonary lesions. It should also be interdicted during menstruation and in hemorrhoidal bleeding and is never to be employed in pregnancy and nursing.

The methodical use of grapes in quantities of from three to eight pounds daily, with or without other nourishment, according to the therapeutic object and the patient's peculiarities, is much in vogue at the so-called uval or grape-cure stations in Germany and Switzerland; such places as Duerkheim, Meran, Vévey, Aigle, Celles-les-Bains and Bingen, being noted for grapes and as climatic places of great repute. Other places of the kind are to be found in the south of France, in Italy and in Austria. At these stations the grape cure and the milk cure go together and both are usually combined with the employment of mineral waters.

The time of year at which the cure is most practicable is from the middle of August to the last of October. The grapes are eaten preferably in the open air, before breakfast, and on an empty stomach; but if the stomach is weak a small crust of bread may be taken with

the first portion, between seven and eight in the morning. The second portion should be eaten one hour before dinner; the third in the afternoon, between three and five o'clock, two hours after dinner, and a fourth may, sometimes, be eaten just before bedtime.

The grapes must be fresh and ripe; they are to be crushed between the tongue and palate, not the teeth, and the skin and seed should be ejected. This latter precaution is, however, not indispensable, being one of those things that may be left to individual preference. Beginning with from one to two pounds, the quantity is to be daily increased half a pound until the prescribed quantity is reached and then slowly decreased. The treatment requires from one to six weeks, during which all heavy and greasy dishes are to be interdicted.

Food that causes flatulence, potatoes, eggs, milk, cheese and beer are also to be avoided; but coffee, chocolate, tea, bread and butter, tender fishes or meat, and in some instances cod-liver oil, are permissible. It is also advisable to use an alkaline powder or a wash to protect the teeth and prevent the gingivitis that may sometimes occur.

As a rule, the grapes especially suitable to bring about a therapeutic modification are those that contain a large percentage of grape sugar. Among the richest are the Hungarian, which contain 301 parts in the 1000. When the stomach will not take the grapes by eating, the freshly expressed juice may be used. They must also be bottled by a special process (*procédé Appert*), and employed at any time of the year.

Externally, grapes have been used in the form of baths, which are provided at some of the European grape cure stations for persons who want to be plunged into the mash of the grapes while it is in a state of fermentation. These baths, used principally for rheumatism, were formerly recommended by Tissot in peripheral paralysis.

The grape regimen, as an after-cure, is regarded in Germany as necessary and indispensable to the completion of a thermo-mineral treatment. Whether used as a principal or as an accessory

resource of treatment, in order to be well tolerated and successful, it requires the concurrence of adjuvant hygienic influences, which may lead to the supposition that success has been obtained rather by such influences than by the grapes themselves. I have, however, obtained the happiest results, aside

from climatological influence, in patients who lived in town and used the grapes methodically at home, while from Maine to California, numerous persons, prompted to try the cure after reading my first paper on the subject, have written me most encouraging results from its use.

UNNECESSARY GYNECOLOGICAL WORK.

*By William F. Barclay, A. M., M. D.,
Pittsburg, Pa.*

THE observations of Dr. Canu and their consideration from a professional standpoint are worthy of record.

The late Dr. Goodell closed a brilliant career of his professional life by a recantation of the work that had given him fame and fortune. The success that attended the operative work of Dr. Goodell's professional life in surgical procedures has never been and never will be surpassed by any surgeon, living or dead. The final evidence left by an honest man of his mistakes in life is a history that should be heeded by the living, as well as be preserved for the guidance of those who might fall into the same errors.

It is and has been for years a positive conclusion in my mind that inestimable harm is done to woman, physically and morally, from gynecological procedures, in the practice of many so-called specialists. Over thirty years' experience in general practice of medicine affords a very considerable field for observation of physicians and their professional work.

It is not the immediate results that we alone consider, but the ultimate effects of disease, that should be a basis for our approval or disapproval of that which has been done in a professional way for the alleviation of the sick and diseased. Good, honest, scientific work on the part of a physician or surgeon claims perhaps more mention and fame than that of any other man. Life is to the individual of all things the most sacred and its preservation equally sa-

cred to him who takes its care and keeping into his professional hands.

There is apparently a want of that just and high appreciation of personal responsibility that should characterize the physician in his life and work. It would seem that many fail to realize from want of knowledge and personal obligation the claims of suffering humanity upon the physician from present professional standards and attainments. The lives of many physicians and surgeons stand out meritoriously in the galaxy of famous men in bold relief of the profession of medicine.

It would seem from a recent article receiving a first place in your good and highly valuable JOURNAL that the time now is in France when the otherwise conservative members of our profession are obliged to protest against the operative procedures upon the reproductive organs of woman that are certainly a shame and disgrace to the profession of medicine.

The same serious, earnest and honest protest against gynecological practice in our own country can be justly made. The general practitioner can observe the results of such surgical practice and is alone able to give a correct estimate of the results obtained.

In the early part of my professional life it was my province to be located in a town that had a so-called "womb doctor." The morals of the community previously were exceptionally good. There was a prevalence or epidemic of uterine disorders immediately following

the location of this doctor in that village. So prevalent did the epidemic become that it was a matter of general observation that the male part of the community suffered to a considerable degree from the pestilential disorders that afflict the generative organs of women.

Unmarried as well as married women flocked to this healer of their uterine disorders. The clamor extended considerable distances and the supposed sufferers came from far away—and learned that they had been neglected and maltreated—so that they returned whence they came, disgusted with their former medical and surgical attendants, and the maledictions that were heaped upon many good, honest, scientific physicians were sufficient to break up confidences that were well placed for long periods of time.

All other diseases faded into insignificance and time was not sufficient to describe the conditions that were discovered by this disciple of Æsculapius. The furor grew into such considerable proportions that the older and experienced physicians and surgeons began to guardedly advise care and discretion on the part of women, but such advice was indignantly cast aside and the goodly advice of age and experience pronounced the result of jealousy and the older members of the profession in that vicinity advised to return to their studies and at least know that they were not fully abreast of the advances in medicine and surgery of the times.

The doctor described the diseases and their effects upon his patients his speculum revealed to his eyes and the treatment that could alone afford relief and save the lives of his patients. It was remarkable that the victims did not become suspicious of the convictions that were forced upon the minds of thoughtful persons and the expressions of disapproval and condemnation of such methods of practice which were pronounced unheard of procedures and the physical and moral results that were certainly to follow this innovation of medical and surgical practice.

It seemed that those women who had

not seen but heard of this wonderful man and the cures that were preached from the housetops, longed to see and feel it necessary to place themselves under his care and treatment. Two or three years demonstrated the effects upon the physical condition and morals of many women in that vicinity. Illegitimacy and scandal of different varieties, an unheard-of state, seemed to prevail to an extent that became fireside topics and to a large degree familiarized the youth with matters that should not have been even mentioned in their presence.

The effects of this teaching cannot be effaced in many years and friendships and confidences that prevailed cannot be re-established. The result was that numerous suits were brought for crimes against the person of a large number of women. Trials in court and the evidence adduced were of the most painful and scandalous character and the end was a demoralization of the most unusual kind as well as a loss of confidence in the profession of medicine. This recital of the work and its unfortunate effect upon the practitioner of medicine and the persons who were misled and imposed upon may seem not worthy of consideration, yet the harm done by needless and harmful examinations of women for supposed diseased conditions of the reproductive organs of women cannot be too generally condemned.

The prevalence of disorders of the generative organs of women is accounted for in a large degree on account of the practice adopted and the mechanical and instrumental devices made use of in different ways in the treatment of supposed and real diseased conditions. At a time when less is supposed to have been known of these organs and their functions, disease seems to have been seldom known or heard of and women lived and enjoyed health and life to its fullest and best extent. It is a usual comment that these diseases in the past were unknown and various discussions are set out as to the etiology of the manifold complaints that seem to blight the lives of women.

The physician should be guided by

scientific attainment and a large experience in his actions and suggestions as to the care and treatment which he administers to woman by all that we call common sense and common decency. That the indiscriminate examination of women is demoralizing is true and can not be too seriously condemned by good physicians. The specialist operates and reports the immediate result, but seldom has an opportunity to observe the condition of the patient afterward and presumes that his work was successful.

It is not the part of a physician to unjustly criticize the work of his brother physicians, yet lines of unwarrantable practice such as are pointed out by Doctor Canu of Paris cannot be considered, for the ultimate credit and success of the profession of medicine. That there is a legitimate, rational line of

practice for the gynecologist, no one would for a moment deny, and the rights of the skillful operator should at all times be sustained. We form conclusions as to the advisability of operative surgical procedures from the immediate and remote results obtained.

It is observable in societies of medical men congregated for the study and discussion of scientific medicine and surgery that the opinion prevails that much of the gynecological work is considered unwarrantable and there is a general dissent and a disapproval of the reckless methods that prevail. The indiscriminate examination of women and exploratory operations very often revealing the errors and ignorance of the operators to the great injury of the patients as well as a general disgust of medical men.

THE TRAVELING OPTICIAN, OR THE "PROFESSOR."

By Charles F. Nolen, M. D.,

Ophthalmic Surgeon Baltimore and Ohio Railroad, Assistant Surgeon Presbyterian Eye, Ear and Throat Charity Hospital, etc., Baltimore.

WHEN we see and read of the mighty ills that are done by the optician, we little know the true state of affairs, for then we only speak of him at home "in his shop," but let us consider the optician abroad, the "Professor," as he calls himself, but more aptly termed the spectacle vender.

He, like a newspaper man, has a certain route. He goes from town to town like a peddler (perhaps in a little better style), selling his goods and swindling the susceptible and unsuspecting sore-eyed "gent" of the rural district. He, unlike the legitimate oculist of the city, handicapped by the optician and his bold sign "Eyes Examined Free," reigns supreme.

Having no competition, or no one to dispute his right and title, he remains "monarch of all he surveys." The optician abroad — as well as at home — in order to trap his victim, advertises "Eyes Examined Free," but in reality he charges as much as an oculist, a

physician who has spent time and money making the eye a specialty.

Often have I had patients leave my office at Brunswick, Maryland, when they are informed that I require a fee for examinations. I ask them if they think I work for love and live on air, to which they calmly say "I had my eyes examined by Professor ———, and he made no charge for the examination," and then I invariably say, why do you come to me? And the answer, "Because my glasses do not suit me," comes upon me like a toxic dose of strychnia and causes the sardonic grin to overspread my countenance.

Now for the glasses. The majority of them are steel frames containing spherical or cylindrical lenses, which would ordinarily cost from a dollar and a half to three dollars and which could be sold from seventy-five cents to a dollar and a half and allow the optician a reasonable profit. But these poor victims succumb to the eloquence of the smooth tongued

"professor" and pay from five to seven dollars for the "extra-fine lenses" and yet he makes no charge for the examination.

CASE I.—Mr. J. W. S., aged 69, came to me with the history of having his sight fail for some months and produced a pair of those "extra-fine lenses"—spectacles with steel frames—and said he had obtained them at a greatly reduced rate—four dollars and a half—and wanted to know why he could not see through them. I found he was wearing R. eye—5. D. Sph. L. eye—4. D. Sph. $V_{\frac{2}{3}00}$ each eye. An examination revealed double cataract.

The optician, as a rule, has two different and distinct prices for his spectacles. The glasses he would charge a dollar and a half for, on an oculist's prescription, he would charge five dollars for if he did the examining himself, and if, on examination, he finds that he cannot improve his "patient's" vision, and therefore no chance to make a sale, he will send him to an oculist—his special oculist—and as a matter of course he expects in return that noble disciple of Æsculapius to send all of his patients with prescriptions for glasses to him. Such a case first went to an oculist, but later came to me.

CASE II.—Mrs. P., aged 40. History: "My sight has been growing bad for one year so I thought I needed glasses and went to an optician, and after putting a number of glasses before my eyes and finding no improvement, he informed me that I had an inflammation in the back part of my eyes and directed me to the office of Dr——." I found—

R. eye $\frac{2}{10}0$ with — 1 D. Sph. = $\frac{2}{5}0$.

L. eye $\frac{2}{5}0$ —with .50 D. Sph. = $\frac{2}{5}0$ +.

On ophthalmoscopic examination I found both lenses cloudy. I informed her that she had an incipient cataract in each eye, gave her the prescription for glasses and—as is my custom—told her to return as soon as she got the glasses in order that I might see if the prescription was properly filled.

She returned to the optician and, womanlike, informed him that I had said she had no inflammation in the

back part of her eye, but that her bad vision was due to incipient cataract, whereupon he replied, "I knew it all the while, but was afraid to tell you."

To return to the "Professor." What damage does he do and how does he do it? By his ignorance of the eye. In the first place he never uses a mydriatic, which in many cases of young subjects is absolutely essential. Then he will force upon a person any glass which is accepted by him and this is especially harmful in children with low degrees of hypermetropia and hyperopic astigmatism, who invariably accept a weak concave lens, which in many cases produces progressive myopia and this sometimes ends in serious complications, such as choroidal changes, detachment of the retina and loss of sight. Another way is explained by the following:

CASE III.—Mr. Thos. P., aged 67. Farmer. "My sight has been failing for eight months. I saw Professor ——, the eye doctor (a new name), in a neighboring town and he told me I had cataracts and wanted to sell me a pair of glasses, but finding none to benefit my eyes, I did not purchase them. I am now blind. I heard of you and have come for you to operate on my cataracts."

I found both pupils dilated, anterior chambers shallow, tension + 3, discs pitting and vision reduced to barely light perception. Absolute glaucoma in both eyes. After his having traveled about forty miles to see me, I was compelled to inform him that I could do nothing for him. It was too late and he must remain blind the rest of his life, all due to the "Professor's" ignorance. Had he seen an oculist at the time he saw the "Professor," an iridectomy might have given him useful vision.

If an oculist—a physician who has spent time and money on the study of the eye—wishes to practice outside of his State, he is compelled to go before a State board and be examined in all the branches of medicine in order that he may practice his specialty in that State and yet this man—"The Professor"—who is not a physician, is free to practice when and where he may. Have we no legislation?

Society Reports.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

REPORTED FOR THE MARYLAND MEDICAL JOURNAL.

Dr. R. H. Babcock of Chicago read a paper entitled A REPORT OF A CASE ILLUSTRATING THE VALUE OF SECONDARY PHYSICAL SIGNS IN THE DIAGNOSIS OF CARDIAC DISEASES. The eloquent and forcible manner in which Dr. Babcock delivered his paper added much to the already scholarly and scientific value it possessed. His remarkable power of minute and exact differentiation in cardiac disease was evident throughout. Among other points brought out were—murmurs are the least reliable signs of valvular disease. An accurate diagnosis cannot be made unless the secondary signs of valvular disease are recognized. If the heart actions are not sufficiently strong there may not be any murmur; or a grave defect may not be observed for the same reasons. Secondary symptoms are, a modified pulse rate, character and rhythm, leading to a congestion of the veins and internal organs.

In some instances there is also systolic venous pulsation of the liver. Such systolic jugular pulsation is diagnostic of insufficiency even if the murmur is not audible. The paper was discussed by Dr. Futterer.

Dr. I. N. Love of St. Louis read a paper entitled WATER. Drugs, drugs, drugs, seem to be the chief inspiration in the life work of too many men. Hydropathy has been a wonderful service to humanity. We can appreciate the necessity of water when we remember that 75 per cent. of our body is made up of water. It is just as important as the solids in life's conditions. The demands for water are affected by the amount of muscular exercise, and degree of temperature to which the body is exposed. For an irritated stomach or bilious colic nothing is superior to liberal quantities of hot water. For a "night out" two or three cups of hot water along with a cup or two of hot coffee; nothing is superior. It soothes the ner-

vous system if you will abstain from food a few hours.

We need water for nutrition, but also as well, and more important, for a proper elimination. Water taken freely acts as a purifier of the system, both by flushing and by its solvent action. The majority of people drink too little water. I would highly advise training children to drink more water. It is a most important agent in improving the complexion. Medicine should be given in large quantities of water. In typhoid fever I insist upon free drinking of pure water. No solvent will act better in removing uric acid from the system, and the only pure water is distilled water.

Copious draughts of water for its stimulating effect or the reduction of temperature has been used many years. The hot pack in convulsions of children is often misused. Better begin with a tepid heat and add cold water gradually. Hot water locally in inflammatory conditions is most excellent.

Dr. Manley of New York: I have often thought that if we only realized what could be accomplished with water in a medicinal way, its use would be more general. I am strongly impressed with the fact that many of the bowel and bladder conditions could be most effectively treated by the proper use of water. In the case of cystitis I know of nothing that will take the place of water. Often I have thought the surgeon's knife might be laid aside if we knew how to use water. A large number of the cases of appendicitis, in my opinion, might be relieved by a thorough washing out of the bowel.

Dr. Hughes of St. Louis: Water is not only good the next morning, but it is good all the time. Its value has not been overdrawn by the author or in the discussions. I am opposed to limiting the amount of water used at and during the meal time. Its action is not only eliminative, but stimulating to both kidneys and bowels. You will remember that the profession was once at the other extreme upon this subject. They considering the craving for water by the patient as abnormal. Some of us

have repudiated water too much and too long.

Dr. Stuckey of Louisville: I cannot give a "next morning experience" like my predecessors, but I can say a word in favor of hydrotherapy. I would take issue with the author on the idea that large quantities of water should be taken along with the food. I cannot see how it will increase or aid in the digestive function, in the stomach, but its importance after digestion cannot be overrated.

Dr. Babcock of Chicago: In some cases of Bright's disease it has seemed to me a sufficient quantity of water might have prevented the condition. If the bowels be constipated and the skin dry, increased work is thrown upon the kidney. Professional men, men of sedentary habits, and women, will often escape the severity of Bright's disease by the unlimited use of water.

Dr. Henderson of St. Paul: I wish to ask the author whether or not the taking of large quantities of water will increase the fat formation. Does the fat man take water because he is fat, or is he fat because he takes water? I am a lean man and do not drink water except in the morning.

Dr. Turck of Chicago: It seems to me the first indication is to find out what the pathological conditions are which you are trying to meet by the water therapy. We must know the condition of the stomach before advising the ingestion of large quantities of water. The habit of taking great quantities of water into the stomach, even two hours after a meal, will hinder the process of digestion. On the other hand, if there is an accumulation of material on the walls and other viscera, then the taking of water would not be objectionable.

Dr. Love, in closing, said: As to the question of *Dr. Henderson* I would say, what is taken into the stomach is food and becomes nutrient that lends to development, continued health, repair and elimination; in these processes water has an important part, if taken in the right way. I did not advise that large quantities of water should be taken

while eating; moderate quantities, of course, was meant. Such cannot possibly interfere with the digestive processes. My paper was not a pathological one. It was therapeutic.

Dr. Isaac A. Abt of Chicago read a paper on THE CLINICAL SIGNIFICANCE OF THE CHILD'S FONTANELLE. In health the fontanelle does not sink below or rise above its bony frame. It has both respiratory and pulsatory movements. With increased intracranial pressure the normal bruit may quite disappear. An early ossification interferes with brain development and produces a brachycephalic skull. In rachitis the involution of the fontanelle is delayed. Marked bulging is caused by the collection of fluid within.

The abnormal retraction of the fontanelle always indicates a condition of inanition; it may be temporary; if chronic it is a serious condition. A deeply sunken fontanelle is always a danger signal in any case. Involution occurs normally at 15 to 18 months. Protuberance and tension indicate meningitis.

Dr. Eduard Boeckmann of St. Paul read a paper on OPERATIVE TREATMENT OF PTERYGIUM. The author discussed the history of the operations for the cure of pterygium; pointing out the objections as well as the advantages of those most frequently used. He suggests an operation which was a combination of some others referred to. A crescentic piece is cut from the pterygium about five lines from its head. This part is curetted thoroughly down to the sclerotic. The head of the pterygium is dissected off. At the convexity of the piece cut out a stitch is inserted and the opposing edges drawn together. This leaves the curetted portion to granulate, and form a cicatrix. The author thinks the results from this method superior to that of any other in his experience. The paper was discussed by *Drs. Wilder* and *Buckner*.

Dr. Wm. H. Wilder of Chicago read a paper on SUBCONJUNCTIVAL INJECTION IN THE TREATMENT OF CERTAIN DISEASES OF THE EYE. The method consists in the injection beneath the conjunctiva of minute quantities of bichlo-

ride of mercury or cyanide of mercury in solution. The operation is not especially painful unless there is inflammation present. It has been advocated for many other conditions and diseases. Its exact limitations and indications are not yet positively decided upon. It has been impossible to get the same good results from the saline injections that can be obtained from the mercury. We have in this new treatment a powerful adjunct to the old and tried methods in some diseases of the eye. It is not to be employed to the exclusion of all others. It is not a panacea, but in indicated cases for the mercurial treatment it is an excellent method.

Dr. Buckner of Cincinnati: I cannot see the special advantage in injecting the solution of mercury under the conjunctiva over the old method of administering hypodermically or through the mouth. The value of mercury in many cases of irido-choriditis cannot be overestimated.

Dr. Boeckmann: I have used these injections since I first commenced to practice medicine, but at this time I am unable to say just how much good they really do. I carefully inject these solutions whenever I find an ulceration of the cornea. In some cases it acts beautifully, in others it is a failure.

Dr. James H. Buckner of Cincinnati read a paper on RUPTURE OF THE CHOROID COAT. The length of time which elapses from the date of the accident and impairment of the vision is no criterion by which to judge of the amount of damage done to the choroid. The rarity of rupture of the choroid is due to the elasticity of the coats, together with the soft and elastic cushion of fat upon which the eye-ball is supported. The paper was discussed by Drs. Wilder and Boeckmann.

Dr. W. S. Caldwell of Freeport, Ill., read a paper on ETHER AND CHLOROFORM; THEIR COMPARATIVE MERITS AS AGENTS FOR THE PRODUCTION OF GENERAL ANESTHESIA. The author gave an extended résumé of the statistics of death from chloroform and ether. Giving his preference for chloroform and the reasons therefor.

Dr. C. B. Parker of Cleveland, O., read a paper on THE USE OF OXYGEN IN CHLOROFORM NARCOSIS. The exhibition of the vital principle, oxygen, with chloroform would seem to be proper on theoretical grounds. In uniting the two there is no chemical union formed between them. It is a mechanical mixture such as we have in the air. The oxygen must be perfectly pure. That usually supplied in tanks is not pure. It must be properly made. The cylinder must have been exhausted of all air before it is filled.

The time required to anesthetize is slightly longer than with chloroform, but the advantages far outweigh this minor inconvenience. Of the dangers attendant I am not prepared to say; as I do not consider an experience of 118 cases guarantees any statement relative to that point. There is total absence of vomiting as well as absence of the extreme pallor and weakened heart beats, with shallow respiration. The duration of the shock from anesthesia is with this agent very much shorter. The patient always recovers promptly without any delirium.

Dr. C. Travis Drennen of Hot Springs, Ark., read a paper on SYPHILIS AS AN ETIOLOGICAL FACTOR IN THE PRODUCTION OF TABES DORSALIS.

Dr. W. F. Barclay of Pittsburg read a paper on DISEASES OF THE NOSE AND THROAT IN CHILDREN. The author dwelt particularly on the possible results of acute and chronic purulent and muco-purulent rhinitis in children. Pointing out not only the necessity for more attention by the family physician, but as well demonstrating that almost if not all of the pathological conditions in the nose, occurring in later life, have their origin in this condition of childhood.

The paper throughout was an unusually practical and interesting one. Practical because we see it daily demonstrated in our professional life. Children should be taught to breathe through the nose rather than the mouth. Parents should be taught that surgery can relieve, very easily, those who are unable to breathe through the nose.

Dr. Love: I cannot pass over this paper without calling attention to the necessity of watching over the child from earliest infancy and in teaching it to care for its nose. Many infectious diseases, no doubt, have their port of entry through this organ.

Dr. Loeb: I wish to add my endorsement to the views of the author and to emphasize the fact that too often indeed the children are blamed for having noses that run and through which they cannot breathe, when they cannot possibly avoid it.

Dr. Coulter: The author's idea of the etiology of deflected septum is one which I advocated some years ago before the Illinois State Society. I am convinced that there must be some other reason in producing defective septum than the bumps that baby received in infancy. In stenosis of any degree there is created, in such inspiration, within the cavity a more or less complete vacuum. Thus the atmospheric pressure is to that degree increased and is a constant force of no inconsiderable gravity.

Dr. J. Merrill Ricketts of Cincinnati read a paper entitled SURGICAL, ME-LANGE.

I. Ligation of brachial artery. Secondary hemorrhage occurred six days after an accident. Five days later another severe hemorrhage occurred. The middle brachial artery was ligated at that time. Six days later a third hemorrhage occurred. Erysipelas followed and recovery was uninterrupted. The superior profunda and its branches were the source of the hemorrhage after the ligation of the brachial. The ligatures should have been applied above the superior profunda.

II. Gunshot wound dividing the facial artery. Roller compresses were sufficient to control the hemorrhage. Multiple abscesses appeared on the cheek subsequently, one of which left a salivary fistula. This fistula was finally closed by the introduction of a silver wire.

III. Talipes equinus varus of left foot with external deformity. Phelps's operation had been made one year previously,

with but slight improvement. The astragalus was removed, five weeks later, through the dorsum of the foot. Division of the tendo Achillis was not necessary.

IV. Hypertrophied Prostate. On the 25th day of a severe attack, double orchidectomy was done under cocaine anesthesia. I have found cocaine will answer every purpose in these cases. This was the third case in which the same operation had been done; all were successful.

V. Sarcoma of the Sacrum. There was present a syphilitic diathesis. It had been previously diagnosed as a fatty tumor. Complete removal was followed by a prompt recovery, leaving a fistula from this rectum into the cavity. This was successfully closed by a later operation.

Papers were also read by: Dr. Fenton B. Turck of Chicago, "Further Report on the Treatment of 500 Cases of Gastritis;" Dr. Casey A. Wood of Chicago, "Some Rare Forms of Keratitis;" Dr. A. E. Stearne of Indianapolis, "The Significance and Occurrence of Capillary Pulsation in Nervous Diseases;" Dr. G. I. Cullen of Cincinnati, "The Newer Remedies in Otology and their Results."

The nominating committee, consisting of Drs. Scott, Coulter, Barclay, Love, Manley, Mathews, Lee, Walker and Wishard, reported the following list of officers for the ensuing year: President, Dr. Thomas Hunt Stuckey, Louisville; First Vice-President, Dr. Chas. A. Wheaton, St. Paul; Second Vice-President, Dr. Paul Paquin, St. Louis; Secretary, Dr. H. W. Loeb, St. Louis; Treasurer, Dr. W. N. Wishard, Indianapolis; Member of Judicial Council, Dr. H. T. Patrick, Chicago.

On motion, the report was unanimously adopted.

The next place of meeting was appointed at Louisville, the third Tuesday of September, 1897.

Dr. H. Horace Grant was elected chairman of the committee of arrangements.

With a vote of thanks to the retiring officers, committee of arrangements and

good people of St. Paul, the association adjourned.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD OCTOBER 2, 1896.

THE annual meeting of the Clinical Society of Maryland was held in the Hall of the Medical and Chirurgical Faculty, 847 North Eutaw Street. The President, Dr. J. M. Hundley, was in the chair.

Reports of the officers were received and the President expressed his thanks to them, especially to the Executive Committee, for their assistance in making the past such a successful year.

The election resulted in naming the following gentlemen to serve for the ensuing year, viz.: President, Dr. S. K. Merrick; Vice-President, Dr. W. D. Booker; Recording Secretary, Dr. H. O. Reik; Corresponding Secretary, Dr. W. G. Townsend; Treasurer, Dr. W. J. Todd; Member Finance Committee, Dr. J. M. Hundley; Executive Committee, Dr. J. W. Lord, Chairman, Dr. W. B. Canfield, Dr. T. P. McCormick.

The Society then adjourned.

H. O. REIK, M. D.,
Secretary.

Correspondence.

DR. WM. H. PERKINS.

ROHRERSVILLE, MD.,
October 14, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Will you kindly publish these resolutions, and oblige,

Truly yours,

C. D. BAKER, M. D.

At a special meeting of the Medical Society of Washington County, held September 22, 1896, the following resolutions were adopted:

Resolved, That by the death of Dr. William H. Perkins, we have been deprived of a valued member, the medical profession of an active worker, and the community in which he lived, of a physician who labored night and day in a

rugged country for the relief of the sick and suffering.

Resolved, That we hereby place upon record our high estimate of the character of our departed colleague, who commanded our respect by his ability and great usefulness during the many years of his professional life.

Resolved, That we tender this tribute to his memory with the expression of our profound sense of sorrow at his death, and that we extend to the family of the deceased our sincere sympathy at their bereavement.

Resolved, That a copy of these minutes be sent to the family of the deceased, a copy to the MARYLAND MEDICAL JOURNAL, and that they be inserted in a county paper. C. D. BAKER, M. D.,

Corresponding Secretary.

ALVARENGA PRIZE.

PHILADELPHIA, October 20, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Will you kindly publish in your journal that the College of Physicians of Philadelphia announces that the next award of the Alvarenga Prize, being the income for one year of the bequest of the late Senor Alvarenga, and amounting to about one hundred and eighty dollars, will be made on July 14, 1897, provided that an essay deemed by the Committee on Award to be worthy of the Prize shall have been offered.

Essays intended for competition may be upon any subject in medicine, but cannot have been published, and must be received by the secretary of the college on or before May 1, 1897. Each essay must be sent without signature, but must be plainly marked with a motto and be accompanied by a sealed envelope having on its outside the motto of the paper and within the name and address of the author. It is a condition of competition that the successful essay or a copy of it shall remain in possession of the college; other essays will be returned upon application within three months after the award. The Alvarenga Prize for 1896 was not awarded.

THOMAS R. NEILSON, M. D.,

Secretary.

MARYLAND

Medical Journal.

PUBLISHED WEEKLY.

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TO CORRESPONDENTS.—Original articles are solicited from members of the profession throughout the world. Reprints will be furnished in payment of accepted articles if the author's wish is so stated at the time.

CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL,
209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:
913 F Street, N. W.

BALTIMORE, OCTOBER 24, 1896.

PHYSICIANS always expect in this region to have a certain number of cases of typhoid fever at this season of the year, but few stop to think that the number of cases and deaths in this State, and especially in Baltimore, is much larger than it ought to be. The disease is, strictly speaking, a preventable one and yet it is evident that not enough is done to keep it down.

Last month the health office reported for Baltimore 84 cases with 39 deaths. There were probably more than 84 cases and this illustrates one part of the trouble. In the well-to-do classes, where everything possible is done for the comfort of the patient, it probably makes little difference whether cases of disease are reported to the health office or not, although the physician who does his duty will not fail to report them, but among the less well-off families and in the poorer districts a case of typhoid fever should be re-

ported as soon as it occurs that the source may be discovered and measures taken to prevent its spread.

To be sure, the inspectors may not do their work as well as some expect, but they are a great improvement on the old custom of sending out ignorant politicians who knew or cared little what was done. The physician's duty is to report all cases which the laws of the city specify and it is only when physicians do what they ought to do that the next steps in the stamping-out of the disease can be taken.

Inspection may in many cases seem to accomplish little, but it usually is of benefit and, under the present arrangement, the visits of the inspectors are not objectionable to the householder. The old question whether the householder or the physician should report the disease crops up periodically. It would seem more just for the householder to take the responsibility of sickness in his own house after his physician has told him formally of the nature of the disease, but as long as the law lays this duty of reporting disease on the physician, so long should he unfailingly report all cases and thus help to check the disease in any quarter.

Baltimore has for many years had more typhoid fever than a modern city should have. Surface drainage has always been a drawback to the health of Baltimore, but the hard rains when they are frequent soon clean the streets better than the best street cleaning department. The death rate of Baltimore is fairly low and some maintain that the lack of a sewer system and the presence of many cess-pools, many of them overflowing, has no evil effect on the health of the city.

The soil of Baltimore is sufficiently sandy to filter the waste products, but that a good underground system of sewers and drainage is needed no one will deny. Until this is ready the city must do the best that can be done and physicians should not fail to help the cause of preventive medicine by reporting all contagious and infectious diseases, including typhoid fever and pulmonary consumption.

Physicians should therefore feel it a duty to themselves and to their surroundings to report to the proper authorities cases of contagious disease, whether they themselves think this important or not. Personal opinion should yield to public laws.

THE physician who goes abroad to study medicine usually likes to do as much as possible in a short time.

The Study of Medicine Abroad. For this reason the short courses held in

Vienna in connection with the large general hospital there have for years proved very attractive.

In the *Atlantic Medical Weekly* Dr. Frank B. Sprague of Providence reviews the methods of post-graduate study in Germany where probably the majority of medical students from America go. After carefully describing the courses and classes in the principal cities of Germany and Austria, he ends by speaking of the importance of a knowledge of the language before beginning study abroad.

In these days of advanced medical study a knowledge of French and German is indispensable, and more and more is the raising of the requirements of admission to the best schools improving the class of students in medicine, and in the schools that require a degree in the liberal arts for admission the highest point has been reached at present.

Dr. Sprague ends his very readable and practical article with a few words about the language as follows :

In Vienna, although the dialect of the people is hard and at times impossible for even a German to understand, yet the professors, as a rule, in teaching use good German. It is necessary for the student to know something about the language and the more he knows the better use he can make of his time. In Vienna a few courses are given in English and many of the professors and instructors speak English and are willing to explain to those who do not understand.

I would not advise one to go who has no knowledge of German. During my stay in Vienna I met several who had been so advised, and were told they could get along without it, and who were sadly disappointed. For any one who intends going it would be advisable to procure German books on the subject they wish to study and study them, and the vocabulary acquired by this means is of great value and well repays for the trouble taken. In Berlin the demonstrations were all German, English rarely being used. In Halle it is all German.

The traveler will fail to find a more honest, polite, courteous people than the Germans, and the one who endeavors to conform to

their customs will not fail to find true friends in his German associates. On the other hand, if he tries to be distinctly American, disregards customs and makes comparisons of methods, he will learn but little, and will be shunned by the people and come home with a poor opinion of the German.

The best way to gain the most is to know nothing before them, anxious to learn their methods, and everything possible will be done to assist you in your purpose and make you happy.

* * *

ONE of the most practical and at the same time simplest paper read at the meeting of the Mississippi Valley Medical Association

Water. was that by Dr. I. N. Love on water. The point upon which he laid stress that many serious kidney complications could have been prevented or at least improved by the free use of water is an idea that should be borne in mind. Water is rarely used in sufficient quantities.

The system needs flushing out just as the sewers of a city need washing out at intervals and if the free use of water internally be neglected the waste products of the body are not, as a rule, so easily eliminated.

The discussion of Dr. Love's paper showed the interest taken in the subject and if physicians would only apply these principles in practice and spread abroad healthy views on the right use of water, they would do much to contradict the statements made by unauthorized persons and would help to check newspaper medical advice.

* * *

THE fiftieth anniversary of the discovery of ether as an anesthetic, which was celebrated last week in the old

The Anesthesia Jubilee. amphitheater of the Massachusetts General Hospital at Boston, was a memorial event and can hardly be appreciated at the present time. Before the discovery of anesthesia even the smallest operation was a torture and the boon conferred on humanity by the use of ether, chloroform and other anesthetics has advanced the facilities of the success of operators in manifold ways.

Such anniversaries and celebrations serve to remind us of the progress of medicine and surgery and tend to keep in our minds the great men who might otherwise be forgotten in the dim years of the past.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending October 17, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		10
Phthisis Pulmonalis.....		16
Measles.....		
Whooping Cough.....	4	5
Pseudo-membranous Croup and Diphtheria. }	11	2
Mumps.....		
Scarlet fever.....	13	2
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	16	8

The daily press announces the discovery by Belring and Knorr of a tetanus antitoxine.

Diphtheria is said to be prevalent at Cambridge, Maryland, the home of one of the members of the State Board of Health.

Dr. Benton H. Whaley of Whaleysville, near Snow Hill, Maryland, died at his home last week in the thirtieth year of his age. Dr. Whaley was a graduate of the University of Pennsylvania in 1889.

The corner stone of the monument to be erected to the memory of the late Dr. John M. Finney, so highly loved and esteemed in his neighborhood by all who knew him, was laid last week at Churchville, Harford County, Maryland, amidst a large gathering and with appropriate ceremonies.

In the new Maryland State Penitentiary building, as well as in the new Southern Police Station House of Baltimore, the rain bath will be introduced. The city jail has several rain baths and Bay View has a very fine one. The advantages of the rain bath over the old tub with all its possibilities of contagion are manifold. These institutions are to be congratulated on the enlightened sanitary knowledge of the projectors.

At the meeting of the University of Maryland Medical Society held last Tuesday night, the following were elected for the ensuing year: President, Dr. Hiram Woods; Vice-President, Dr. St. Clair Spruill; Secretary, Dr. E. E. Gibbons; Executive Committee,

Drs. J. R. Abercrombie, J. M. Holland and W. I. Messick; Editorial Committee on the Bulletin, Drs. W. B. Canfield, Chairman, Randolph Winslow, John S. Fulton, St. Clair Spruill, J. M. Hundley, Hiram Woods and Charles W. Mitchell.

Dr. John B. Hamilton solved the problem of his removal from Chicago by order of Surgeon-General Wyman of the United States Marine Hospital Service, by resigning from that service. The foundation of the whole trouble was some personal feeling between Dr. Wyman and Dr. Hamilton, together with the difference of opinion held by these two officials on the subject and position of a Bureau of Public Health. Dr. Hamilton's resignation was accepted on the 15th of October. Dr. Hamilton holds positions in Chicago more valuable to him than his official rank. At the same time if he and his chief had been on good terms there is no doubt that he could have been retained in Chicago. The *Journal of the American Medical Association* could ill afford to lose Dr. Hamilton, although there would probably be plenty of applicants for his editorial chair. Surgeon-General Wyman has already given notice of an examination to be held in Washington on February 3, 1897, for Dr. Hamilton's position.

At the last meeting of the Medical Examining Board of Virginia, held September 8, 9 and 10, 1896, the following schools sent applicants: College of Physicians and Surgeons of Baltimore, 3 applied, 2 licensed, 1 rejected; University of Maryland, 1 applicant, 1 licensed; Baltimore Medical College, 1 applicant, 1 rejected; Columbian College, Washington, 1 applicant, 1 licensed; Howard University, Washington, 1 applicant, 1 rejected. Since the organization of the Board in 1885, the following statistics are recorded: University of Maryland, 136 applicants, 107 licensed, 29 rejected; College of Physicians and Surgeons, 120 applicants, 92 licensed, 28 rejected; Baltimore Medical College, 27 applicants, 11 licensed, 16 rejected; Baltimore University, 8 applicants, 8 rejected; National Medical College, Washington, 1 applicant, 1 rejected; Georgetown University, 2 applicants, 1 licensed, 1 rejected; Howard University, 22 applicants, 5 licensed, 17 rejected; Georgetown College, 1 applicant, 1 rejected; Columbian College, 6 applicants, 5 licensed, 1 rejected.

Book Reviews.

A TREATISE ON SURGERY. By American Authors. Edited by Roswell Park, M. D., Professor of Surgery and Clinical Surgery, Medical Department, University of Buffalo, Buffalo, N. Y. In two very handsome octavo volumes, comprising about 1600 pages, with about 800 engravings, largely original, and about 40 full-page plates in colors and monochrome. Volume I, General Surgery and Surgical Pathology. Volume II, Special Surgery. Price per volume, cloth, \$4.50; leather, \$5.50. Net. Lea Brothers & Co., 1896.

Volume I of the above mentioned treatise is now published and might well be called "Park's Treatise on Surgery," since 16 of the 32 chapters are contributed by Dr. Park himself. The chapters on surgical pathology are all contributed by Dr. Park and it is needless to say that the work has been well done, as he is a recognized authority in this field. Beginning with the consideration of "hyperemia, its consequences and treatment," the reader is led to the study of the "surgical pathology of the blood" and incidentally to the histology of the same fluid and the methods of examination of the blood. The third chapter is devoted to the study of inflammation. Inflammation is a term used to express the effort of the organism to repel invasion of noxious irritants and it is always the result of infection, in which it differs from hyperemia, which is a non-infectious condition.

In considering the way in which the living cells of the invaded area attempt to destroy the infecting organisms, Dr. Park gives play to his practical fancies and likens it to a battle in which the cells destroy the germs by the process of phagocytosis, but in many cases the germs are the victors and the cells are themselves destroyed. "Pus, then, is the ordinary consequence of the contest above alluded to and each pus cell represents the dead body of a phagocyte, which has perished in the attempt to protect the parent organism from harm. That it has died valiantly can almost invariably be determined, because within its dead body may be seen the body of one or more of the minute invaders which it has attacked."

The chapters on ulceration, gangrene, autoinfection and surgical infections in general are written by Dr. Park, as well as the two chapters devoted to the diseases common to man and animals. In speaking of the treat-

ment of hydrophobia, Dr. Park says: "There is no authenticated case on record of recovery after medication by drugs. It is probable that recovery has never followed anything save the modern inoculative treatment. (Pasteur's.)"

Dr. J. A. Fordyce contributes the article on syphilis and Dr. W. F. Belfield that on gonorrhea and its sequelae. The article on syphilis is illustrated with several colored figures of chancres on the lip and penis, but if they are true to nature they do not resemble any similar lesions which have come under the observation of the writer, indeed most of the chromographs in the book are entirely too highly colored. The important subjects of injury and repair have been assigned to Dr. Nancrede of the University of Michigan, who treats them from the modern scientific standpoint. We must pass over the other chapters and simply state that the entire volume is well written and excellently illustrated and is probably the best book of its size in the English language to put in the hands of students.

A VEST-POCKET MEDICAL DICTIONARY. Embracing those Terms and Abbreviations which are Commonly Found in the Medical Literature of the Day, but Excluding the Names of Drugs and of Many Special Anatomical Terms. By Albert H. Buck, M. D. New York: William Wood & Company. 1896. Price \$1.00.

This is a very compact and well printed dictionary, $2\frac{1}{2}$ by $3\frac{1}{2}$ inches and less than $\frac{3}{4}$ inch thick, containing not only the ordinary words, but many new ones. The definitions are good and full. It is based on the best text-books and larger dictionaries and is prepared with great care. The print and binding are excellent.

REPRINTS, ETC., RECEIVED.

Mortality from Suicides. The Mutual Life Insurance Company of New York. 1896.

Three Cases of Pus Tubes, in Two of which the Gonococcus was Present, in the Other the Streptococcus Pyogenes. By J. Mason Hundley, M. D. Reprint from the *American Journal of Obstetrics*.

PARKE, DAVIS & CO.'S new price list for 1896 has been received and is not alone a price list and catalogue, but is stored with much valuable information about drugs and kindred subjects.

Current Editorial Comment.

NEWSPAPER MEDICINE.

Cleveland Journal of Medicine.

WHEN the newspaper essays to inform its readers upon medical subjects it almost invariably makes itself ridiculous to cultured people, whether they have any medical education or not.

MEDICAL SOCIETIES.

Atlantic Medical Weekly.

EVERY medical man should be a member of a medical society. He will never know how great a man he is till some one praises him in a discussion, nor how small a man till some pompous fellow-member takes him to task; but all these frictions serve but to round and smooth a busy life, and no one can do without it who desires to be a physician in the highest acceptancy, and not a man who doctors.

THE DOCTOR.

The Outlook.

OF all lives the life of the physician is the most self-denying. He has no time that he can call his own. His home is his office, and furnishes him no sweet retreat from irksome care. The night can never assure him unbroken rest. Sundays are often, whether he will or no, his busiest days. He has no holidays, and few and fragmentary vacations. Friendship furnishes him fewer solaces than to other men, for his friends are generally also his patients. He meets men in their morbid conditions—when they are sick and miserable; when they are well he knows them not. He can hardly make a friendly call without the hazard of having it converted, before the evening is over, into a professional one. He fights a battle in which, no matter how many victories he wins, he is sure to be defeated at last—for he is fighting death. And when the defeat, which must come sooner or later, does come, he is fortunate if unreasonable friends do not charge the defeat upon his lack of science or of care. But no man renders a more grateful service; no man comes nearer to our hearts; no man is more beloved. Other services may be as great, but none is more deeply and tenderly appreciated. He summons back from death the child, and puts him in his mother's arms; the wife, and reunites her to her husband. No fee can ever compensate for such a service. He to whom it is rendered is forever debtor to the doctor.

Publishers' Department.

COMMUNICATIONS.—All letters intended for the Subscription and Advertising Departments of the JOURNAL should be addressed as below.

ADVERTISEMENTS.—Copy for advertisements should be received not later than Saturday to secure insertion the following week.

PHYSICIANS when writing to advertisers will confer a favor by mentioning this Journal.

MARYLAND MEDICAL JOURNAL,
Washington Office, 209 Park Avenue,
913 F Street, N. W. BALTIMORE, MD.

Convention Calendar.

OCTOBER						
S	M	T	W	T	F	S
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NOVEMBER						
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DECEMBER						
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13	14	15	16	17	18	19
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27	28	29	30	31
..

State Societies.

OCTOBER.

15-16. VERMONT, at St. Johnsbury. D. C. Hawley, M. D., Secretary, Burlington, Vt.

NOVEMBER.

10-II. MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, at Hagerstown.

27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.

16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery.

VOL. XXXVI.—No. 3. BALTIMORE, OCTOBER 31, 1896. WHOLE No. 814

Original Articles.

THE IMPORTANCE OF LABORATORY METHODS IN DIAGNOSIS.

By Charles E. Simon, M. D.,
Baltimore.

THIRD PAPER.

The examination of the expectoration for tubercle bacilli and elastic tissue.—It is a mournful fact that there are men who are entitled by the law to practice medicine who not only maintain that an examination of the sputum for tubercle bacilli is unnecessary in the diagnosis of pulmonary tuberculosis, but who even venture to assert that the so-called tubercle bacillus has nothing whatsoever to do with the production of tuberculosis.

The writer has before him a letter in which a person who professes to be a physician writes as follows:

"Tuberculosis if produced by a germ at all is produced by a life-given germ, not an organized germ as the bacillus. It is a law of nature that living matter produces other living matter of the same kind, governed by the same laws and endowed with the same capabilities. That the cause should be a certain bacillus is false, for it must of necessity produce another bacillus of the same kind. I have made microscopical examinations of the various sputa, taken from cases affected with tubercular, caseous, fibroid and miliary and in all such cases the sputa had a lifeless appearance, as viscous, and in the most cases the excretion of the bowels showed nothing but a defect of proper nourishing the system."

The laws of Maryland actually allow such a person to practice medicine! The only difference between a man of this kind and an Indian medicine man, or a gypsy hag, is that the one possesses a microscope and the other not. True, it is not altogether clear through which end of the instrument this scientific investigator looked. Were some such progressive newspaper as the *Baltimore Evening News* to start a crusade against "physicians" of this caliber, it would probably accomplish more direct good than by its investigations of policy joints and the like.

It is not customary to send circulars of information to every physician in the world, whenever a new truth in medicine has been elicited by carefully conducted investigations, but it evidently is the duty of every physician to familiarize himself with such facts.

Were a physician to mistake the pregnant uterus for a fibroid tumor and proceed to its removal a suit for malpractice would undoubtedly follow and end his career. The public has the right to demand from the physician of today an early diagnosis of pulmonary tuberculosis, and the writer strongly questions the propriety of shielding the blunders of his colleague who has treated an early case of phthisis with post-nasal applications and the cautery.

When a patient who has wasted away to a skeleton comes to the physician complaining of cough, expectoration, fever and night sweats and when a physical examination reveals the existence of cavities as large as an orange, a special examination of the sputum for tubercle bacilli will not be necessary to establish the diagnosis. In the early stages, however, when the loss of flesh is as yet but trivial, when the physical signs are indefinite, and the expectoration scanty, an examination of the sputum is absolutely necessary and cannot be dispensed with.

Physicians should remember that an early diagnosis of pulmonary tuberculosis is of vital importance, as successful treatment depends upon the measures taken before the lung is extensively diseased. The person who claims that he is able to diagnose pulmonary tuberculosis in every instance without an examination of the sputum betrays unjustifiable ignorance, and the person who shields a man of this kind as a matter of professional etiquette does not deserve the name of an honorable physician. To stand by "professional etiquette" is here ridiculous.

By neglecting examinations of the sputum the physician not only injures his patient, but actually places in danger the lives of the persons with whom the patient comes in contact. The infectious nature of pulmonary tuberculosis is an established fact.

Technique.—If the sputum from a case of well-advanced pulmonary tuberculosis be examined with the naked eye, upon a dark background, such as a piece of ordinary window glass, placed upon a black paper, tiny little cheesy particles will usually be observed presenting a yellowish-white color.

Experience has shown that these particles are particularly rich in tubercle bacilli, and attention should be directed to their presence, whenever a sputum is to be examined for the organism in question. When found, a fragment is placed upon a coverslip and spread out in as thin a layer as possible with the aid of a platinum needle, or by pressure between two coverglasses.

The specimens are then allowed to dry in the open air and fixed by passing the coverglass, held with a pair of forceps, three times through the flame of a Bunsen burner or a spirit lamp.

Very frequently, however, and particularly so in early cases of phthisis, no such cheesy particles are found. In that case the sputum should be thoroughly agitated and a drop spread out upon a coverglass in as thin a layer as possible. The specimen is allowed to dry and is fixed as described. Among the numerous methods which may be employed for the purpose of staining the tubercle bacilli, that of Ziehl-Neelson is perhaps the most convenient.

The solution consists of 90 c. c. of a concentrated alcoholic solution of fuchsin. A few drops of this solution, which may be kept almost indefinitely, are placed upon the coverglass specimen, held with forceps, and heated over a small flame until ebullition occurs. The specimen is then immediately rinsed in a five per cent. solution of sulphuric acid, whereby all bacteria with the exception of the tubercle bacilli are decolorized. The excess of acid is washed off with water and the specimen dried with filter paper. It is then mounted in a drop of Canada balsam, cedar oil, or water, and is ready for examination.

The search for tubercle bacilli may be further facilitated by employing a contrast stain. To this end the specimen, before mounting, is stained for one minute with a few drops of a saturated aqueous solution of methylene-blue; the excess of stain is removed by washing with water, when the specimen is dried and mounted as described. The whole procedure of staining may be further abbreviated by employing Gabett's method. The specimen is here first stained with the carbol-fuchsin solution and immediately transferred to a solution containing 1 to 2 grammes of methylene blue in 100 grammes of a 25 per cent. solution of sulphuric acid. It is then washed with water, dried and mounted.

A $\frac{1}{2}$ oil immersion lens is most convenient in the examination of specimens, but, as has been pointed out before, a $\frac{1}{6}$ is sufficient.

If tubercle bacilli be present, they will appear as elongated, slightly curved rods, sometimes presenting a beaded appearance. They are stained red by the carbol-fuchsin, and can thus be distinguished without difficulty from all other bacteria that may be present. If the counterstain with methylene-blue has not been employed all other elements in the specimen will be colorless, while all with the exception of the tubercle bacilli, which are stained red, will appear blue if the double stain has been used.

If tubercle bacilli be found the diagnosis of course is clear at once. If not, other specimens should be prepared, and if a negative result be obtained even then, it will be advisable to make further examinations of the sputum from time to time. In doubtful cases the following procedure may be recommended: The bottle containing the sputum is kept for several days at a temperature of from 37° to 40° C. An ordinary drying oven answers the purpose admirably. About a tablespoonful of the sputum is mixed with two tablespoonfuls of water and treated with 8 to 10 drops of a 30 per cent. solution of caustic soda.

The mixture is boiled until a homogeneous consistence has been obtained. 5 to 10 tablespoonfuls of water are further added, when the mixture is again boiled for a few moments, and then placed in a conical glass for sedimentation. If a Daland's hematokrit be at hand, the required sediment may be obtained in a few minutes.

The supernatant fluid is poured off and the sediment examined as described. In this manner it is not infrequently possible to demonstrate the presence of tubercle bacilli, where all other methods have previously furnished negative results.

It should be remembered, however, that only a positive result is convincing, although tuberculosis may probably always be excluded, when notwithstanding most careful and repeated examinations, no tubercle bacilli are found. In every case where tuberculosis is known to exist, it is well also to examine the sputum for the presence of shreds of

elastic tissue. If found we may assume that ulcerative processes are going on in the lungs.

To this end the thick purulent portions of the sputum are placed upon an ordinary piece of window glass, blackened upon its lower surface and covered with a similar but somewhat smaller piece of glass, the sputum being thus spread out into a thin layer. With a little practice it is possible to thus discover particles of elastic tissue with the naked eye.

The beginner will frequently mistake particles of bread, collections of milk globules and fragments of epithelium coming from the tongue, for elastic tissue. It is hence advisable to pick out the suspicious looking particles and to examine them under the microscope.

A little practice in this technique will render examinations of sputum an easy matter for any physician who understands the use of the microscope.

It is needless to say that the bottles or plates containing the sputum should be thoroughly disinfected in a shallow dish containing a 1 to 500 solution of bichloride of mercury as soon as possible, so as to prevent the drying and the dissemination of tubercle bacilli through the air. Negligence in this respect may lead to disastrous results.

The most convenient receptacles for sputa are the so-called sanitary cuspidors, made of paper, which may now be obtained from most instrument makers and first-class druggists. Glass and porcelain vessels should be subjected to the action of boiling water for at least one hour.

Since writing the above the Health Department of the City of Baltimore, through the intervention of the committee on public sanitation of the Baltimore Reform League and the MARYLAND MEDICAL JOURNAL, has been provided with a bacteriological laboratory at which the physicians of the city may have the sputa of their patients examined for tubercle bacilli, free of expense. It is to be hoped that physicians who are themselves unable to make the necessary examination will freely avail themselves of the opportunities thus offered.

A CASE OF PROTRACTED LABOR.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, OCTOBER 13, 1896.

By J. N. Upshur, M. D.,

Professor of Practice of Medicine, Medical College of Virginia.

MRS. H., aged 40, of good health prior to two months before delivery, when she had an attack of dysentery. I saw her at that time. She had a recurrence of the attack twice, but treated herself with the same remedies prescribed by me during the first attack. With this exception, her pregnancy had been an uneventful one.

Labor came on suddenly at 7 P. M., September 11—pains so active and strong that I was twice sent for within an hour. When I reached my patient at 8 P. M., she looked pallid and showed evidence of extreme suffering—pains were strong and regular, coming on every few minutes. Digital examination revealed a cervix *very rigid*, thick and about two inches long, through which could be felt the vertex presenting in the first position. The pains, though violent and causing much suffering, made little impression in dilating the rigid cervix. To procure rest and relaxation of the cervix, about 12 P. M. I administered a hypodermic of sulphate of morphia, grain one-fourth, sulphate of atropia, grain $\frac{1}{150}$. This procured her some respite from suffering for three hours, when pains again became active. Cervix had slightly softened. She was now given chloroform, but only with the effect of stopping pains. A second hypodermic was given at 7 A. M. and I left the patient for three hours.

On my return at 11 A. M., I found cervix relaxed and dilatable and pains active and regular. Patient looked pallid, with feeble pulse, and had clammy skin. But that she had had three exhaustive attacks of bowel trouble and a wearing labor from the beginning, I should have suspected concealed hemorrhage. Chloroform was again administered and she was normally delivered at 12.45 of a still-born male infant weighing nine pounds. She had last felt the

motion of the child just prior to the onset of labor. There was delay in the delivery of the placenta and the uterus was in a state of complete inertia. Examination showed the placenta detached and it was easily removed; introduction of the hand being followed on delivery by a double handful of coagula. It was evident that partial detachment of the placenta had taken place prior to the birth of the child.

The uterus remaining obstinately relaxed, the hand was passed into the cavity, which presented a feeling of a ragged bag, while on the right of the uterine wall, half way between its anterior and lateral portion, could be felt an incomplete rupture of the uterine wall in its long diameter about three inches long and extending four-fifths of the thickness of the uterine wall, so that a narrow escape had been made from opening the peritoneal cavity. After administration of sulphate of strychnia, grain $\frac{1}{60}$, and fluid extract of ergot (Squibb's) $\frac{5}{v}$, with introduction of ice into the cavity, the womb was induced to contract finely. I would have preferred a hot salt solution, but it was not available and only a septic syringe with which to use it, if it had been. The patient reacted well. Having always had a free secretion of milk, tincture of camphor was ordered applied to the breasts, beginning a few hours after delivery, extending its application well into the axillae. This proved efficient and no milk was secreted.

On the second and third days after delivery the temperature only rose to 99.4° F. On the fourth day it reached 100° F. Lochia profuse, offensive, of the color of dirty dish water. Free hot douche of hot water and borax was ordered thrice daily.

But on the morning of the fifth day, finding no improvement except temper-

ature slightly subnormal (98° F.), the uterus was washed out freely with hot salt solution. Uterus was found above the pubis, and spongy. Ordered tincture of iron, ergot and nux vomica in full doses every four hours.

On the sixth day I found little change in lochia and that seventeen napkins had been used in previous twenty-four hours; pulse fair at 90 to 100; temperature as on day before. Curette (sharp) was used and a number of dirty shreds of sloughing tissue were removed.

On the seventh day, patient expressed herself as feeling better; pulse and temperature same as on day previous. Curette was again used and large pieces of sloughing tissue were removed; curette gave way suddenly, giving sensation of entering a cavity, and was followed by a discharge of an ounce or more of thick, dirty-colored, stinking pus. I believe the rupture had healed on the surface and an abscess had developed at bottom. The curette was freely used until discharge was slightly stained with blood. Half gallon of salt solution was run through the uterine cavity till it came away clean and odorless; patient expressed herself as feeling much more comfortable.

On the eighth day, pulse and temperature same; ten napkins used; curette applied; no shreds. Washed out with peroxide of hydrogen, followed by salt solution, and lightly packed with iodoform gauze.

Twenty-four hours after delivery the patient complained of severe headache, located chiefly in the occiput. This was relieved by two doses of phenacetine of gr. v. each, but returned when the drug wore off. Subsequently benefited by sodii bromidi gr. xx, and caffeine gr. ss. Patient had a comfortable night, has some appetite, expressed herself as free of headache and feeling much better; said headache returned after treatment of womb. She has taken on two days full doses of quinine, but I could detect no benefit from its exhibition. Bowels have been moved on alternate days by exhibition of compound senna powder. Tongue has been clean but pallid from beginning.

On ninth day, eleven napkins in last twenty-four hours; temperature, 100° F.; pulse, 108; had a good night, but sweated freely; appetite fair; discharge very little offensive; curette used; 3j of pus discharged from uterine cavity; came from site of rupture; uterus reduced decidedly in size; washed out freely with peroxide of hydrogen, one-fourth to three-fourths hot water, followed by salt solution. Patient complained of violent frontal headache during the dressing, which passed off when completed; light packing of iodoform gauze applied.

Tenth day, eight napkins; pulse, 100; temperature, 99.4°; no odor in discharge; on removing gauze, 3ss pus flowed away; uterus cannot be felt above pubis; measured three inches with probe; swabbed out with pure peroxide and replaced with gauze; complained of severe frontal headache during the dressing, which subsided when it was completed.

Eleventh day, five napkins; temperature, 99.2°; pulse, 100; on removing gauze, 3ss pus; no sweating.

Thirteenth day, temperature, 99.4°; pulse, 100; no sweating.

Fourteenth day, pulse, 96; temperature, 99° F.; no flow.

Sixteenth day, pulse, 100; temperature, 99.5°; convalescence established; patient sat up an hour and a quarter.

Twenty-eighth day, patient dressed and moving about her room; says she is absolutely comfortable; no pain or weakness in back or elsewhere, except a little unsteady on her feet.

Remarks.—The above case presents first in interest, the *condition of the cervix* at the beginning of labor, so *hard and resistant* as to give the impression of previous disease, which had not been the case, except a slight cervical catarrh, for which I had treated her prior to her sixth confinement, which had been rapid and uneventful. Pains seemed absolutely inefficient in producing dilatations until after the administration of morphine—the resistance in spite of such strong contractions being responsible for the subsequent complications. I am sure that the patient's

pallor was due to concealed hemorrhage from premature partial separation of the placenta, not appreciated at the time because of my knowledge of three attacks of dysentery in the previous two months and the suffering she had borne incident to the violent uterine action, ineffective and depressant. The inertia of the womb was simply due to muscular tire.

The rupture of the uterine wall in its long axis is of interest, because the almost invariable rule is that when rupture occurs, it is in the transverse direction. "Boudl reported nineteen cases in 40,614 labors occurring in nine years in the Lying-in Hospital in Vienna. Jolly, in Paris, found 230 cases in 782,741, excluding from his list lacerations of the cervix. Harris estimates one case in 4,000 labors. Lusk found forty-seven deaths from this cause in New York between 1867 and 1875, inclusive, or one death in six thousand labors."—(*Lusk's Obstetrics*, page 603.) I had a case of complete rupture due to an after-coming hydrocephalic head—patient dying five hours after delivery.

Hagenberger estimates the mortality at 95 per cent.; C. Braun at 89 per cent.

(*Lusk*, page 603). The above facts show how rare is this complication, even though incomplete.

Another point of interest is the prevention absolutely of the milk formation by the early and repeated use of tincture of camphor in a woman who had in six previous confinements had an abundance. A long experience has proven no remedy better than camphor in my hands. The fact that only twice did the temperature reach 100° F. in a uterus so septic as I have described is remarkable and the efficient action in the direction of cure of free curettage, douching with salt solution and application of hydrogen dioxide in stopping suppuration, evidences the great value of this therapeutic method. The violent reflex headache coming on during the dressing and disappearing when it was completed is of interest, and shows plainly that the violent headache coming on twenty-four hours after labor was also reflex in character.

I deem myself most fortunate to have had such a satisfactory result in this case and place it on record for the instruction and encouragement of my professional brethren.

DISEASES OF THE RECTUM AND ANUS.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, OCTOBER 13, 1896.

By George K. Sims, M. D.,

Adjunct Professor of Clinical Surgery, University College of Medicine, Richmond, Va.

FORMERLY this class of diseases received but little attention by the profession; consequently quacks fell heir to a great many of them. In recent years they have received more attention, but the majority of the profession do not give them as much attention as they merit. There is no class of diseases that cause more annoyance and suffering, or that patients will be more grateful for curing them, or more willing to pay for. Time will permit me to give only a general outline of the most important of them tonight.

A careful physical examination should be made in every case. The dorsal is

the best position for external inspection and eversion of the anal margin; for parts higher up and for operation, the knee-chest and the lateral or Sims' position is better. A female should always be placed in the Sims' position, for obvious reasons.

In making the examination, the tissues surrounding the anus should first be carefully inspected; after this, the interior of the rectum must be examined. This can be done either with the finger or the speculum, or both. A digital examination will be more agreeable to the patient if the finger is well lubricated and introduced gently. The

best lubricant for the finger that I have used is ordinary toilet soap; it fills the cracks around and under the nail and prevents the fecal matter from sticking. This can be easily washed out and you get rid of the bad odor, which is a very important consideration. If there is much soreness about the parts, carbolized vaseline will be much more agreeable to the patient.

In introducing the finger, notice the amount of resistance offered by the sphincters. The internal is an involuntary and the external is a voluntary muscle; they are separated by a well marked interspace. A firmly contracted sphincter is met with in cases of fissure ani; a loosely contracted one may be due to atony or paralysis, induced by repeated stretching by a polypus, hemorrhoids, or prolapsus. After passing the sphincter, the finger enters a large cavity called the rectal pouch, which is apparently without shape or form; if empty, the anterior and posterior walls are in contact. A great aid to digital examination is to fill the rectum with air or water, introduced by an ordinary bulb syringe. This puts the wall of the rectum on the stretch, so that any diseased condition can more easily be detected. After the digital examination, it may be necessary, for purposes of diagnosis or treatment, to introduce the speculum; in many cases, it will be necessary to give an anesthetic to do this, or even to insert the finger.

1. *Hemorrhoids*.—The first subject I wish to review is hemorrhoids. Of these, there are two varieties—external and internal—depending on their relation to the sphincter. External piles are venous or cutaneous. Of the former there are two kinds; first, a varicose condition of the external hemorrhoidal veins; this is very common and usually requires no treatment; the second is the thrombic pile, due to a thrombus in the external hemorrhoidal veins. A thrombic pile is tense, hard and very painful; it usually comes on suddenly and the bluish appearance of the thrombus can often be seen. The treatment may be palliative, which consists in keeping the stools very soft by laxatives and enemas

and the local application of soothing lotions or unguents, such as lead and opium wash, fluid hydrastis or hamamelis and lead water; or unguents of belladonna, opium, etc., followed by warm fomentations. If the size of the tumor or the pain seem to justify it, immediate relief may be given by incising the pile and turning out the clot—then applying a pad of antiseptic gauze and firm pressure by a "T" bandage to prevent the cavity from refilling.

Of cutaneous piles, authors recognize three varieties: First. Redundant cutaneous piles. These are common in persons having internal piles and are said to be diagnostic of that condition, with weakening of the internal sphincter. The second form is the hyperplastic pile; this is due to a hyperplasia of the connective tissue, from abrasions, fissure or ulceration. It is most often seen at the posterior border of the anus in connection with fissure ani—in fact, it is pathognomic of that disease. The third form is a hypertrophy of the normal radiating folds of the anus, the result of eczematous inflammation. The treatment of these conditions consists in removing the cause; then, if necessary, a portion of the redundant tissue may be excised and treated antiseptically. External piles should never be injected, as it can do no good and causes unnecessary torture.

Internal hemorrhoids are vascular tumors composed of dilated veins, capillaries and small arterioles. Ordinarily, they lie just within the anal opening, but they may extend as high as two inches from the anus; they may be single or multiple. They are caused by an increase of blood pressure about the rectum with obstruction to the return circulation, arising from diseases of the heart, lungs, or liver, enlarged prostate, stricture of the urethra, stone in the bladder, phimosis, cancer, or stricture of the rectum and chronic constipation. Symptoms—a feeling of weight, itching, tenesmus and pain, which may radiate to the genital or other pelvic organs. At first these are slight, but they gradually grow worse. The piles begin to protrude when at stool; later, a portion

of the mucous membrane may prolapse. If they are not replaced, the contraction of the sphincter muscle will cause them to become swollen and congested and gangrene may result. Rupture of the thin mucous membrane covering them causes hemorrhage—this may be very slight, or be several ounces. The blood is much redder than blood which escapes higher up than the rectum. The bleeding often relieves the pain and local symptoms for a time; but if it occurs frequently, as it often does, may cause serious anemia. In long-standing cases the sphincter becomes so relaxed that it allows the protrusion of the piles to exist almost constantly.

The diagnosis, when they are protruding, is simple enough; but when they are not filled with blood, your finger may scarcely feel them. In that case, after emptying the rectum with an enema, make the patient bear down as if at stool; at the same time, draw the anus open with your fingers. They may now be seen or felt, as they become distended. The smooth folds of mucous membrane of prolapse will hardly be mistaken for piles, as they lack the bunched appearance and the purplish color.

Rectal polypus, when protruding, is harder than piles or prolapse and has a distinct pedicle.

Treatment.—The majority of cases can be made very comfortable, if taken in time, by palliative measures; they consist in keeping the bowels open by diet, exercise, salines, laxatives and enemas. Try to remove the cause by appropriate treatment. Locally use astringent injections and unguents; these should be pushed well up into the rectum. When these measures fail to give relief, a more radical treatment becomes necessary. Moderately severe cases may at times be cured by dilatation of the sphincter, by means of the two thumbs. This requires an anesthetic, and must be done thoroughly. When the patient cannot take chloroform, or remain in bed for a few days, a cure may be effected by injecting a few drops of carbolic acid into the center of each pile, treating only one at a time.

This is tedious and uncertain at best, and not to be recommended. A better method of treating such cases is the one described by Dr. Earle of Baltimore; this consists in injecting cocaine, applying a clamp, cutting off the pile, and stitching the edges together with a continuous suture of catgut. By treating only one pile at a time by this method, the patient need not lose any time from business.

When, however, the piles are large and numerous, they had better be all removed at one sitting, by one of the standard operations, which are the clamp and cautery, ligation, and Whitehead's. Of the three, the clamp and cautery is the one most generally used, being, at the same time, simple, safe and effective. I will not enter into the details of these operations, but will mention a few practical points in the management. The patient should have a brisk cathartic two days before, and an enema the day before, and on the day of operation. The sphincter should be well stretched and temporarily paralyzed at the time of operation. No packing is necessary afterwards except a good external pad and a "T" bandage.

The bowels can be moved on the third or fourth day with salines or enemata. The patient must be kept in bed five or six days, and in a week can be discharged.

2. *Anal fistulas* may be complete or incomplete—the latter are external and internal. They result from a peri-rectal or an ischio-rectal abscess, which was not opened early enough to prevent the formation of an orifice in the bowel. The sinus is prevented from healing by the passage of fecal matter and gases, which keep up the irritation. The fistulous track is usually tortuous, and there are frequently blind sinuses leading off from it into the cellular tissues surrounding the rectum. Sometimes it goes around the bowel and comes out on the opposite side, forming a horse shoe fistula. An internal sinus, if left to nature, will sooner or later make an opening on the skin; but it may burrow into the ischio-rectal fossa a long time before it does so.

The *diagnosis* is easily made when the external or internal opening is found, but it is often difficult to find the internal opening. It will usually be found within the grasp of the internal sphincter—occasionally higher up. The sinus may extend above the internal opening, and rarely a second opening is present. If the probe, carefully passed into the sinus, fails to find the internal opening, inject some hydrogen dioxide into it; it will frequently find its way through and can be seen foaming in the rectum. It must be remembered that a sinus opening far down the thigh may lead to the rectum. On the other hand, we should not forget that a sinus in the neighborhood of the anus may be due to caries of the tuberosity of the ischium or coccyx, or even hip-joint disease, and have no connection with the rectum. In incomplete fistulae, there is an intermittent discharge of pus from the anus, especially when pressure is made upon the circum-anal integument.

Treatment.—Injecting the fistula with stimulating solutions is usually unavailing. An operation is almost always necessary to make a cure. Fistulae resulting from stricture of malignant disease of the rectum should not be operated upon unless the primary cause can be removed. All abscesses in this region should be opened early, curetted and treated antiseptically; this can often be done at the office, under cocaine. A very good method of treating many cases is the elastic ligature; draw it tight, and allow the patient to go about his business. The pain is quite severe for the first day or two. In three to seven days the ligature will cut through, and while it is cutting, the tract is beginning to granulate behind it, so that when it has cut through, two-thirds of the tract will be healed. The rest of it will heal after a few applications of silver nitrate, and aristol, iodoform or loretin. The ideal treatment is to incise all the structures between the two openings on a grooved director, also lay open any communicating sinuses; the fistulous tract should then be scraped out with a curette, or dissected out, washed out with a 1 to 3000 bichloride

solution, and the walls brought together by catgut sutures. Aristol or loretin should then be applied and the bowel confined four or five days. In incomplete internal fistulae, find the orifice, then pass a grooved director from within against the skin, making an opening here, then incise all the structures and proceed as in the complete fistulae. When it is impossible to clean out the fistulous tract thoroughly, they should be washed out with hydrogen dioxide, then kept packed with iodoform gauze to make them heal up from the bottom. The rectum should be washed out with an antiseptic solution after every evacuation and fresh gauze packing applied.

3. *Anal fissure* is a linear ulcer situated just within the verge of the anus. It results from a tear or excoriation in the mucous membrane of the sphincter, caused by hardened feces, syphilis, or the irritating discharges of diarrhea or dysentery. It fails to heal because of the frequent irritation by fecal matter, and the motion and spasm of the sphincter.

The *symptoms* of anal fissure are remarkable for the severity of the pain, which is intense, notwithstanding the insignificance of the lesion. It comes on during defecation, and may last for many hours. The manner in which it is reflected may cause the patient to attribute his suffering to disease of the bladder, urethra, or other pelvic organs. The dread of the intense pain causes the patient to refrain from emptying the rectum, and constipation results. Spasm of the sphincter muscle is the cause of this agonizing pain, and is always present in true and anal fissure. It is often so great that it is impossible to pass the finger into the rectum, or to make a satisfactory examination, without an anesthetic.

Treatment.—In recent cases, a cure can often be effected by keeping the feces soft by laxatives and enemata, washing out the rectum with carbolic acid or other antiseptic solution after each evacuation, the application of silver nitrate, and some antiseptic powder or unguent to the ulcer. When this treatment fails, as it often will in chronic

cases, the next best treatment is to thoroughly paralyze the sphincter by stretching it with the thumbs. Complete anesthesia is required for this operation. Another method, said to be more effectual than dilatation, is to make an incision through the base of the ulcer, dividing either the whole or a portion of the sphincter. Any small tab of mucous membrane or polypoid growth complicating the fissure should be removed at the time of operation.

4. *Prolapse of the rectum* may be partial when the mucous membrane only protrudes, or complete when all its coats are involved, the rectum being turned inside out. The disease is most common in children and the aged, from a weakened condition of the tissues. Anything that causes abnormal straining and bearing down — as stone in the bladder, urethral stricture, polypus, dysentery, chronic constipation, or phimosis — may be the exciting cause.

The *diagnosis* is usually very simple; the prolapsed tissues appear at first only when at stool, but frequent repetition of the process soon weakens the sphincter so that the prolapse occurs whenever the patient walks or assumes the erect posture. If allowed to remain out long, the tissues become so much swollen that it is difficult to reduce, and strangulation and gangrene may result.

Treatment. — The prolapsed tissues must be reduced by gentle, though firm, pressure with the fingers, using some lubricant on the parts. During the reduction the patient should assume the knee-chest or the lateral (Sims') position. If these measures fail, cover the finger with a piece of lint and insert it into the orifice of the protruded bowel and push it in slowly and gently. After it is reduced the finger is withdrawn and subsequently the lint is pulled out. The rectum must be suppurated by a T bandage, or strips of adhesive plaster, applied so as to hold the nates close together to prevent recurrence. The bowels must be kept soft and any trouble that is likely to produce straining must be removed. The patient should lie on the side or back or stand while evacuating the bowels. Astringent enemas,

ointments and suppositories are serviceable.

Under such a line of treatment, cases occurring in children and cases of moderate severity in adults can be cured. The more serious cases require surgical treatment. With a thermo-cautery make several longitudinal applications to the prolapsed tissues. Another method is to clamp longitudinal portions of the mucous membrane, which is then cut off and the stump seared with a red hot cautery iron. In chronic cases in which the sphincter has become relaxed, the triangular portion of the sphincter and also a portion of the posterior wall of the rectum may be removed; sutures are then applied so as to bring the divided walls together.

Ulceration of the rectum may be dysenteric, syphilitic, tuberculous, or malignant. The exciting cause is often constipation. It is most common among the aged and is often mistaken for dysentery. Symptoms: Irregular diarrhea, pain, tenesmus, muco-purulent and blood-stained discharges and other symptoms of dysentery. Ulceration in the upper part of the rectum is far less painful than in the lower part, within the grasp of the sphincter.

Treatment. — Keep the excreta soft, wash out the rectum after each stool and use mild, astringent, antiseptic and anodyne enemas and suppositories. A weak carbolic acid solution is very soothing and healing. An enema of laudanum in starch water will relieve the pain. Tubercular ulcers require iodoform and syphilitic cases require the iodides and mercury in addition to the local treatment.

PREGNANCY UNDER DIFFICULTIES.—Chavannaz (*British Medical Journal*) found in making a post-mortem examination of the body of a woman, aged 60, who had been operated upon for intestinal epithelioma, that the right Fallopian tube and ovary were absent, and that the uterus was retroflexed and bent slightly to the left. The patient had had three children (sex not stated), and her menses, which disappeared at the age of 50, had always been regular.

Society Reports.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

REGULAR MEETING HELD OCTOBER 13, 1896.

THE President, Dr. Landon B. Edwards, in the chair. Dr. Mark W. Peyser, Secretary and Reporter.

Dr. J. N. Upshur read a paper on A CASE OF PROTRACTED LABOR. (See page 40).

Dr. Paulus A. Irving thought it remarkable that there was no hemorrhage from the site of the uterine tear. Another striking feature of the case was the low temperature in spite of the large amount of pus dammed back—the more remarkable when we consider how a little excoriation or tear of the os or cervix is so often followed by a rise of temperature—sometimes even to 104° F. He commended Dr. Upshur for his most admirable treatment and successful issue, especially in the employment of hydrogen peroxide. Nothing could be added to it.

Dr. Lewis M. Cowardin called attention to the fact that hydrogen dioxide affected not only pus, but all organic fluids. Where a blood-clot was to be dissolved, he knew of nothing more efficacious.

Dr. J. S. Wellford thought hydrogen dioxide a better disinfecting agent than all others, because it produces superoxidation of all effete matters, liberating in the body ozone. In employing it we imitate the processes of nature, changing the specific character of the ptomaines.

He asked Dr. Upshur the positions of the placenta and abscess in relation to the tear.

Dr. Arthur Jordan spoke of a case in which he had successfully used creatin, bichloride of mercury solution, hydrogen dioxide and hydrozone. Hydrogen dioxide had given better results than the first two, but pus was more diminished with two injections daily of hydrozone than three of hydrogen dioxide.

The President stated that in his practice a vaginal douche of hydrozone prevented the third day fever of the

puerperal state. His experience, with that of Dr. Irving, Dr. H. M. Taylor, Dr. Edward McGuire and others, in some cases of puerperal sepsis, had shown the great value of intra-uterine injections of hydrogen peroxide and hydrozone—simply keeping the os uteri well dilated so as to give free egress to the foaming pus, etc., that pours out. He uses a half-pint to a pint each injection—diluted or not with water.

Dr. Upshur, in closing the discussion, said the placenta was above and posterior to the rupture, the abscess being seated in the bottom of it. He has firm convictions with regard to the value of hydrogen dioxide. Often the efficiency of applications to the cervix, externally and canal, is lessened by a layer of mucus that cannot be wiped away by cotton. In cases of this kind, the dioxide on an applicator will dissolve the mucus, allowing the application to come in contact with the tissues. For cleansing purposes, he preferred a simple solution of hydrozone or hydrogen peroxide to the chemical agents, such as bichloride of mercury, carbolic acid, permanganate of potassium, etc.

Dr. G. K. Sims read a paper on DISEASES OF THE RECTUM AND ANUS. (See page 42).

The secretary reported a case of horse-shoe fistula successfully treated with hydrozone. Girl, aged 15 years. An abscess developed on either side and above the anus, which were on the point of rupturing. Both were incised and afterward injected with hydrozone until the discharges came away clear. The solution made its way from one opening to the other, demonstrating the presence of a horse-shoe fistula. In a week it was in a fair way to recovery.

Dr. Wm. H. Parker reported a case of LARGE HYDROCEPHALIC HEAD AT DELIVERY. Mrs. C., white, aged 30 years. Sixth pregnancy—overdue a fortnight. On September 10 labor began, becoming active on the 12th, delivery occurring normally on the 14th. The child was hydrocephalic and born dead. The head was nineteen inches in circumference, thirteen inches from ear to ear, fourteen from nose to occiput. All pre-

vious labors had been tedious, one lasting ten days. In April previous, a prolapsus of the uterus had been corrected, the hydrocephalic pregnancy occurring immediately afterward. There was no pelvic deformity.

Dr. Jordan prefaced a report by the following questions referring to hydrophobia.

First. Is there any more danger in the ordinary bite of a dog and that of one supposed to have been bitten previous to any manifestations on the part of the bitten dog?

Second. While one is in a state of doubt, what plan of treatment should be pursued, taking into consideration the moderate pecuniary circumstances of the patient?

He then related that a little dog had either received a blow or had been bitten on the left side of the head above the ear. There was nothing positive as to the cause of the injury.

Inquiry failed to reveal a supposed mad dog in the neighborhood. Two weeks passed and there was no manifestations of rabies. Then the dog bit a child, aged 18 months, that had been teasing it, on the back of the hand. The father immediately and thoroughly sucked the wound and cauterized it with carbolic acid. It progressed nicely, the swelling passed off and the wound got well with three separate and distinct scabs—one large, a second smaller, in which had formed a third, which now remains.

After biting the child the dog was sent away. Eight or nine days elapsed before any symptoms occurred in the dog and then it died after a series of not well defined spasms.

NEW YORK, October 8, 1896.

Dr. Arthur Jordan, M. D., Richmond, Va.

Dear Doctor:—We have received your letter of the 7th instant, and, in answer to your inquiries, beg to state that in the case you mention it may be that the child has not been inoculated with the virus of hydrophobia, although we are not positive about this, as experiments have shown that in some cases the saliva is virulent as many as six days before

the animal presents any symptoms of hydrophobia.

The fact that the little patient has suffered no inconvenience from the wound does not mean that all danger is averted, as the period of incubation varies between two weeks and one year, or more.

As for the possible treatment of the child, we would say that it might be too late to apply it, especially if the patient has been bitten on the face or hands, as a period of more than ten days has elapsed since the infliction of the bite. However, if you think it advisable to send the child here for treatment, we are willing to try our best in his behalf.

We beg to add that the person who sucked the wound has exposed herself to a great danger of infection in case the saliva be virulent and the lips and mouth of the operator be not perfectly sound at the time.

Yours truly,

NEW YORK PASTEUR INSTITUTE,
per F. T. LABADIG,
Physician in Charge.

Dr. Jacob Michaux said that there was a strong element of doubt regarding the condition of the animal before the child was bitten and as to the cause of death; also as to the existence of rabies in the neighborhood before the dog was injured. Because of the wound found on the dog's head there is a reasonable probability that meningitis caused the spasms. Of all sensational things, hydrophobia is the greatest in the popular mind. It is a mistake to have the dog killed. If a person is bitten, it is thought the mere killing prevents hydrophobia. The dog should be watched. A cause of convulsions, which should not be overlooked, is heat.

Dr. Wellford said the dog should be kept alive ten or twelve days. *Dr. Jordan* will not have any trouble with his little patient. If the child had been older, he might have trouble by mental impression or apprehension. He thought a great deal of reported rabies is hysteria. He had seen, in all his long practice, but one case of rabies satisfactorily demonstrated. Fright, fear and alarm causes death from nervous exhaustion.

He believed that keeping a patient under chloral and chloroform for five or six days would obviate their effects. In the case reported, the prompt and efficient measures instituted would have saved, even had the animal been rabid. If the dog had been eating meat at the time, there might have been danger of septic infection.

Dr. Jordan said the dog was not killed, but died. He realized the strength of mental impressions. Post-mortem examination showed no meningitis or encephalitis.

Dr. J. S. Wellford exhibited a BOLUS OF HAIR CAUSING BOWEL OBSTRUCTION AND REQUIRING LAPAROTOMY. The bolus of hair was about an inch and a half in diameter and three inches long, removed from the small intestine of a girl aged fourteen. There were appearances of beginning menstruation. Pain appeared first in the right iliac region, but soon spread over the whole abdomen, and was intense. There was no fever or increase of pulse, and bowel operations were small. *Dr. Long* was called in consultation and thought it a ruptured appendicitis. Upon operation, this bolus of hair was found completely occluding the lumen of the intestine. There was violent vomiting, which, just before the operation, became stercoraceous.

Dr. Virginius W. Harrison reported the case of a boy, aged three years, who had been in the habit of eating wall paper, and finally passed balls of it. Constant surveillance was necessary to keep him from it.

Dr. Upshur reported a case of PUERPERAL MANIA. The patient had been afflicted for six or eight years with chronic diarrhea. Previous to her marriage she had been a shirt maker. During the spasms, she passed a large ball composed of cotton threads, which it is supposed she swallowed in biting off threads to thread her needles. The interesting point here is not the obstruction, but chronic diarrhea which resulted. After recovery from mania, she was put on treatment for diarrhea and is now entirely well.

On presentation by *Dr. J. N. Upshur*,

resolutions recommending *Dr. W. F. Drewry*, now First Assistant Physician to Central State (Lunatic) Hospital, Petersburg, Va., as Superintendent of the same on the retirement of the present officer, were unanimously adopted by the Academy.

Medical Progress.

FLATULENCE AND INDIGESTION IN NURSING WOMEN.—*Dr. H. C. Anderson* of Brooklyn, N. Y., resident physician of the Brooklyn Seaside Home, has had, during the past season, unusual success in treating cases received at the Home. He has given especial attention to the poor mothers who come to spend a week at the Home with their young infants.

These women live mostly on potatoes and other starchy foods, and in consequence are frequently the victims of intestinal indigestion.

Dr. Anderson reports that taka-diasase promptly relieves the flatulence which accompanies this form of dyspepsia, and they appear to feel much more comfortable in every way.

It is one of the most important factors in the problem of infant feeding that mothers, especially among the very wealthy and the very poor, do not have a proper diet. Consequently, the milk which they secrete is deficient both in quality and quantity, and this renders it all the more difficult to treat their infants.

* * *

AMPUTATION OF THE BREAST FOR CARCINOMA.—*Dr. Tansini (Medical Record)* calls attention to the fact that many times a cancer of the breast recurs in the apparently healthy skin along the scar. To avoid this possibility, he advocates the removal of the entire skin from the breast and a strip four inches wide extending into the axilla. The author removes all glands and the pectoral muscle. To cover this defect he twists a flap from the back on a pedicle near the axilla and sews it into the wound.

MARYLAND Medical Journal.

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CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL.

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, OCTOBER 31, 1896.

THE semi-annual meeting of the Medical and Chirurgical Faculty of Maryland will be held this year at Hagerstown and as

The Faculty's Meeting at Hagerstown.

the committee of arrangements have finished their work in a very complete manner it is hoped that the profession interested will respond by a large attendance and a hearty coöperation. It will be remembered that seven years ago when it was decided to reorganize these semi-annual meetings, which in years past had been such failures, the Faculty went to the picturesque and hospitable city of Hagerstown, where the profession and citizens treated them royally, and have been most cordial in wishing a repetition of that visit. Next Tuesday week this meeting will be held. The following is the official programme, subject to such changes as may be necessary:

The Faculty will meet on Tuesday, November 10, at 2 P. M., and adjourn at 5.30 P. M., meet again at 7.30 P. M., and adjourn at 9.45 P. M.,

when a banquet and reunion will be held. On Wednesday, November 11, the meeting will be called to order at 10.30 A. M., and adjourn at pleasure.

As nearly as possible, papers will be read in the following order:

Tuesday, November 10, First Day, 2 P. M.

1. C. Birnie, Continued Fevers.
2. J. C. Hemmeter, Concerning the Nature and Treatment of Gastric Acidity.
3. George J. Preston, Cerebral Syphilis.
4. J. Whitridge Williams, Malaria Complicating Gynecological Operations.
5. Thomas Opie, Gynecological Diagnosis.
6. Thomas A. Ashby, A Review of Some Mooted Questions in Intra-Pelvic Surgery.
7. J. M. Hundley, Value of the Cystoscope in the Diagnosis and Treatment of Diseases of the Female Bladder.
8. J. D. Skilling, Antitoxine in the Treatment of Laryngeal Diphtheria.
9. J. Fussell Martenet, The Urgency of Antitoxine Therapy with Reference to Diphtheria Antitoxine.
10. S. K. Merrick, To what extent does the Hypertrophied Pharyngeal Tonsil Atrophy at or about Puberty?
11. George H. Rohé, Early Symptoms of Paresis.

12. Samuel J. Fort, Manual Training for the Feeble-Minded.

13. Hiram Woods, Jr., Acute Otitis Media and Mastoiditis with Trivial Local but Marked Constitutional Symptoms, Mastoid Operation. Recovery.

Tuesday, 7.30 P. M.

Demonstrations.

14. William Osler, A Case of Diffuse Scleroderma; Exhibition of Patient.

15. William H. Welch, William Osler and Simon Flexner, Pathology and Bacteriology of Typhoid Fever.

16. Julius Friedenwald and Standish McCleary, A Case of Lymphatic Leukemia with Exhibition of Blood Specimen.

17. William B. Canfield, Modern Methods of Examining Urinary Sediment.

18. J. M. T. Finney and Mr. Smiles, Use of the X Rays.

Adjournment at 9.45 P. M. for supper.

Second Day, Wednesday, November 11, 10.30 A. M.

19. J. W. Humrichouse, Some of the Results of Bacteriological Research.

20. V. M. Reichard, A Case of Hydrophobia.

21. J. H. Hardcastle, Bowel Obstruction Simulating Appendicitis.

22. R. Percy Smith, Glycerine as a Treatment for Sciatica.

23. Frank Martin, The Various Operations for the Removal of the Tongue and adjacent Areas affected with Cancer.

24. Randolph Winslow, A Case of Gastrotomy for Esophageal Obstruction.

25. J. C. Bloodgood, A Case of Lateral Anastomosis of the Ileum and Cecum following Resection of Gangrenous Bowel; Exhibition of Patient.

26. William S. Gardner, The Diagnosis of Retrodisplacements of the Uterus.

27. Robert T. Wilson, Treatment of Pelvic Inflammatory Conditions through Vaginal Incisions.

28. Joseph E. Gichner, The Present Status of the Treatment of Tuberculosis.

29. Edward J. Bernstein, Treatment of Wounds of the Eye and Ocular Appendages.

30. H. O. Reik, The Practical Use of Skiascopy.

It is thus seen that the material supplied is abundant and the opportunities for discussion great. The papers will be limited to twenty minutes and the discussions must also be short in order to finish the whole programme. The attendance will probably be large, not only in remembrance of the cordial reception given at Hagerstown seven years ago, but also because the whole profession of Western Maryland has been individually invited to be present and take part in the proceedings. The demonstrations of typhoid fever will be especially interesting and the Programme Committee invites all physicians, whether members of the Faculty or not, to be present and take part in this discussion, and those having specimens of lesions bearing on this disease are cordially invited to exhibit them. The Röntgen Rays machine will probably be on exhibition during the whole session.

As for the details of arrangements, the two best hotels are the Hamilton House and the Baldwin House. Both are good and at both the rates are from \$2.00 to \$2.50, according to location. The Western Maryland Railroad will sell round-trip tickets to Hagerstown from any point on its line at two cents a mile. These tickets are issued especially for this meeting and are good from November 7 to 14. To obtain them a card for presentation to the ticket agent must first be procured from the

Corresponding Secretary, Dr. W. Guy Townsend, 10 West North Avenue, Baltimore. This reduction will make the round-trip tickets from Baltimore cost \$3.33, instead of the usual fare, \$4.50. Trains leave Hillen Station at 8.11 A. M., reaching Hagerstown at 12.15 P. M., in time for the first session. There is also a convenient train in the afternoon and returning trains may be had immediately after adjournment.

* * *

THE Book and Journal Club of the Faculty is composed of Faculty members who give five dollars a year to *The Book and Journal Club* supplement the appropriation for buying books for the library.

The opening meeting for this season was held last Wednesday night and interesting reports on medical progress were made by Drs. William Osler, L. McLane Tiffany and William H. Welch.

Dr. Osler dwelt on the medical side of progress, Dr. Tiffany took up such surgical subjects as appendicitis, renal surgery and treatment of malignant tumors with certain antagonistic organisms and Dr. Welch reviewed the newer literature on bacteriology and pathology. The new books purchased by the Club and by the Frick fund were shown and a general discussion took place.

Membership to the Book and Journal Club is open to any member of the Faculty and is bound by no stringent rules. The books thus purchased, while the property of the Club, are put on the shelves of the library and may be read by any Faculty member.

The spirit of progress which has of late shown itself in the Faculty and the library is easy to trace and the advances made in the past few years make membership to the State Faculty very desirable.

The membership Committee of the Faculty is preparing a list of eligibles and an active, systematic canvass will be made throughout the State. The Frick Library has been well furnished and will be dedicated with appropriate ceremonies in the near future. A tablet will be erected to the memory of Dr. Frick and addresses made by Drs. S. C. Chew, George W. Miltenberger and others. It is also probable that the Governor of Maryland and Mayor of Baltimore will be present and possibly other officials, as this is one of the oldest organizations in the State.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending October 24, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		13
Phthisis Pulmonalis.....		21
Measles.....		
Whooping Cough.....	8	2
Pseudo-membranous } Croup and Diphtheria. }	20	10
Mumps.....		
Scarlet fever.....	18	1
Varioloid.....		
Varicella.....		
Typhoid fever.....	13	4

Diphtheria is said to be prevalent in St. Michaels, Talbot County, Maryland.

Russia will allow foreign Jewish physicians to attend the Twelfth International Medical Congress at Moscow.

The Book and Journal Club met last Wednesday night at the Faculty's Building and reported on new literature received.

St. Luke's Hospital of New York is having trouble in giving a clear title to the property not long ago vacated on Fifth Avenue.

Dr. Talcott Eliason of Hancock, Maryland, died last week. Dr. Eliason was graduated from Jefferson Medical College in 1847.

According to reports, the Colorado Board of Health advises that the great army of invalids who regularly come to that State be excluded.

The Hebrew Hospital and Asylum of Baltimore has received \$300 from the estate of Mrs. Henrietta Bergman, widow of Philip Bergman, of that city.

An enterprising company for insuring impaired risks is offering physicians commissions for the recommendation of cases which want insurance.

Dr. William H. Baltzell, who has spent some time abroad in studying, has returned to Baltimore and will open an office at 604 North Charles Street.

The Police Department of Baltimore suggests the use of a bicycle ambulance. Hos-

pitals that receive city or State aid should be compelled to use ambulances.

A New York physician has been sued by an undertaker, who is also a coroner, for calling cases of smallpox chickenpox, thus exposing the coroner-undertaker to smallpox, which he contracted.

The New York State Board of Health complains that its powers are too limited and the annual appropriation of \$200,000 too small. The Maryland State Board of Health has an annual appropriation of about \$5000.

Dr. A. C. Abbott, formerly connected with the Johns Hopkins Hospital, but now Professor of Hygiene at the University of Pennsylvania, is giving a series of lectures on his specialty to the Johns Hopkins medical students.

The Maryland General Hospital has succeeded in obtaining Miss Annie Murrey as head of the nurses' training school of that hospital. Miss Murrey is a graduate of the Edinburgh Royal Infirmary and has held responsible positions in this country.

Dr. Thomas C. Price, a prominent physician of Frostburg, Maryland, was instantly killed by a freight train as he was crossing the tracks. Dr. Price was a graduate of the University of Maryland in 1852 and was a brother of Dr. A. B. Price of the same place.

Dr. Frank Donaldson, formerly of Baltimore, and whose father was so well-known here for years, has been made Professor of Physiology in the new College of Physicians and Surgeons of San Francisco, of which Dr. Winslow Anderson, formerly editor of the *Pacific Medical Journal* of that city, is dean.

For the next meeting of the Clinical Society of Maryland, to be held Friday, November 6, the following programme is announced:

Amoebic Obstruction of the Liver Perforating the Inferior Vena Cava. Dr. Simon Flexner. Discussion to be opened by Dr. Osler.

Etiology of Infantile Convulsions. Dr. F. D. Sanger. Discussion to be opened by Dr. C. W. Mitchell.

Report of a Case of Symphysiotomy. Dr. T. A. Ashby. Discussion to be opened by Dr. K. B. Batchelor.

Report of a Case of Osteoma of the Auditory Canal. Dr. Harry Friedenwald. Discussion to be opened by Dr. Herbert Harlan.

Book Reviews.

CATALOGUE OF THE BAUSCH & LOMB OPTICAL COMPANY. Rochester and New York City. 1896. Fifteenth Edition.

This is an exceedingly valuable collection of information on microscopes and other instruments of precision, including microtomes, photo-micrographs and laboratory apparatus. The illustrations are abundant and the volume, showing the extensive facilities of the company, is well worth an examination.

ANNOUNCEMENT OF THE ALMA SANITARIUM, Alma, Michigan. Illustrated.

The situation of the Alma Sanitarium and its wonderful facilities make it a place worthy of consideration when sanitarium treatment is under advisement. Dr. E. S. Pettyjohn is the resident physician and a large staff of consultants from Detroit, Chicago and other places also give their services.

THE editors of Mathews' Medical Quarterly announce that with the January issue of that publication its name will be changed to *Mathews' Quarterly Journal of Rectal and Gastro-Intestinal Diseases*. This is a change which has been deemed necessary for some time, as it is essential that the title of a medical journal should convey to the reader an idea of its contents and this has not been the case with its name from the beginning. There will be no change in the policy of the journal in the least. As it will continue to be the only English publication devoted to diseases and surgery of the rectum and gastro-intestinal tract, the articles which will appear in it will be limited to these subjects. The journal will continue to be edited by Drs. J. M. Mathews and Henry E. Tuley and published in Louisville, Kentucky.

REPRINTS, ETC., RECEIVED.

Inguinal and Scrotal Cysts, Simple and Complicated, in Infants or Young Children. By Thomas H. Manley, M. D. Reprint from the *American Medico-Surgical Bulletin*.

Some Remarks about Asepsis in Military Service. By Lieutenant-Colonel Edward Boeckmann, Assistant Surgeon-General Minnesota National Guard. Reprint from the Proceedings of the Fifth Annual Meeting of the Military Surgeons of the United States.

Current Editorial Comment.

LIFE INSURANCE EXAMINER.

Medical Examiner.

A PHYSICIAN who desires to do the best work as an examiner or as a medical director needs more than scientific training. That is a prerequisite, of course, but he also needs a worldly training, which can only be had outside of his study. He should mingle with men, he should not hesitate to take an active part in all honorable effort as he has an opportunity to do so. He should above all things devote considerable time to travel, not alone in foreign countries, but over the field in which his company proposes to do business.

DRUGGISTS' PRESCRIBING.

American Medico-Surgical Bulletin.

WE would be pleased to see the pharmaceutical journals, of which there are many excellent ones, take up this question and teach the offenders in the craft the difference between right and wrong. Many druggists grumble because many physicians are in the habit of prescribing and dispensing medicines. This course will become the necessary one with physicians who are desirous of practicing from a scientific standpoint, if it be found that, in communities where there exists no law forbidding the druggist to prescribe, he is overstepping his province, which is simply that of compounding and dispensing, and nothing more.

SCIENTIFIC PROGRESS.

Medical World.

ALL that is now known of medical science is but as a child's primer compared with what the world will some time know. But even what we now possess of medical knowledge comes to us not as a result of our own merit, our personal investigations and achievements; it comes as an inheritance from past ages, and represents the result of countless theories advanced, the vast majority of which prove to be erroneous and are now forgotten, while the precious few finally remained to take their place as permanent steps in scientific progress. Who can tell the innumerable mistakes and discarded errors that mark the line of march of medical science? Yet each one of these mistakes was thought by its originator to be a scientific truth, perhaps of great value.

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	..	..	..	..	..

DECEMBER						
S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	..	..	..

State Societies.

NOVEMBER.

- 10-11. MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, at Hagerstown.
 27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.
 16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
 BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
 CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
 GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
 MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
 MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
 THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.
 THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
 THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 2d Friday and 4th Monday, at 8.15 P. M.
 MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
 UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PHARMACEUTICAL.

TETANUS.—Four cases of traumatic tetanus, under treatment at the Cook County Hospital at the same time, make a remarkable record in the treatment of this fatal malady. Three out of the four recovered, while the one that died was prognosed most favorable of the quartet on admission to the hospital. The first case was in the service of Dr. A. F. Lemke. The patient was a boy of 17 years who stepped upon a nail and received a puncture in the sole of the right foot. He was admitted to the Hospital on the 20th day of September, 1896, and had general tetanus of the most pronounced type. On the 22nd he was given 50 cubic centimeters of the Pasteur Vaccine Company's Tetanus Antitoxine, which was followed by a decided amelioration of the symptoms. On the 23rd he was given 20 cubic centimeters more, and on the 29th a third dose of 20 cubic centimeters. This was the last dose of the Antitoxine used and his recovery was uninterrupted. The other three cases were in the service of Dr. L. Dysart, furnishing interesting records, who kindly furnished the notes herewith given. The first patient was a colored boy of 14 years. The trismus in this case was well marked and accompanied by some *risus sardonius*. The convalescence was established and the patient was practically well a little more than three weeks from the date of the attack.

MARYLAND MEDICAL JOURNAL

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VOL. XXXVI.—No. 4. BALTIMORE, NOVEMBER 7, 1896. WHOLE No. 815

Original Articles.

A REPORT OF THREE CASES OF NEURITIS ASSOCIATED WITH TYPHOID FEVER.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND, OCTOBER 16, 1896.

By George J. Preston, M. D.,

Professor of Physiology and Clinical Professor of Nervous Diseases, College of Physicians and Surgeons.

It is interesting to note how many and various are the causes which are apparently responsible for the production of neuritis.

Omitting the factor of traumatism, which is such a frequent cause of local neuritis, we find that inflammation of the nerve-trunks, according to Ross and Bury's classification, may be—

1. Idiopathic, as Landry's paralysis.
2. Toxic; due to poisoning by alcohol, lead, arsenic, mercury, etc., or accompanying or following many affections of diverse natures, as diphtheria, typhoid, malarial and other fevers, syphilis, gout, rheumatism and many other conditions.
3. In addition to these forms, neuritis is seen associated with various vaso-motor and trophic diseases; tabes, Raynaud's diseases, etc.
4. Again, the various professional cramps are in many instances due to inflammation of the nerve trunks.

Thus it would seem that inflammation in the trunk of the peripheral nerves may be induced by a great variety of causes, sometimes mechanical, at other times toxic or from diminished nutrition. It is impossible to say whether the neuritis which is associated with typhoid fever is due to the direct action

of the specific poison or is a result of the rapid and marked nutritive disturbances so characteristic of this disease.

That neuritis is not a common complication of typhoid is evident from the fact that during my connection with the City Hospital for seven years I have not seen a single case in the wards there. Osler reports but four cases of neuritis in 389 cases of typhoid treated at the Johns Hopkins Hospital.

It is not uncommon during the course of typhoid fever to have patients complain of pain in the limbs and this sometimes appears to be a distinct local neuritis. Hanford and Osler have both called attention to the "tender toes," which would seem to be a mild form of local neuritis. The graver forms of neuritis are apt to appear during or shortly after convalescence. The following cases are examples of the severer forms of neuritis.

CASE I.—M. S., seen at the Hebrew Hospital in June, 1895. The patient, a young man of 24, had never had any serious illness. He was taken with fever May 25 and came to the hospital May 30. The fever ran a fairly typical course, reaching 105° F. On July 8, a relapse occurred and the temperature, which had gone down under the cold

bath, again became high. He continued in a very critical condition, with high temperature and rapid, feeble pulse from this time until July 21.

With the beginning of convalescence the patient began to complain of pain in his legs, the slightest contact with the bedclothes producing great suffering. For three or four days there was an erysipelatosus blush over the right leg and later a small abscess developed at the ankle. The pains in the legs continued and an examination made at this time showed loss of patellar tendon reflex, some atrophy, double foot drop and the reaction of degeneration. There was no marked disturbance of sensation.

By the middle of November he was able to walk on crutches and he left the hospital December 15, walking with some difficulty. He slowly recovered the use of his limbs and is now perfectly well.

I am indebted to Dr. Savage for careful notes of this case.

CASE II.—Miss H., hospital nurse, seen with Dr. Brack. On June 9 of this year she was taken with typhoid. The disease ran a very severe course, with high temperature, and the patient was delirious for four weeks. On the fourth day after the subsidence of the fever, which lasted for six weeks, the patient complained of very severe pain in the right arm and leg, with inability to move the affected parts. In ten days the pain subsided.

At this time, after spending a day in the country, the pain returned with great violence, spreading over the whole body, but most intense in the left leg. The left leg showed some edema and was hyperesthetic.

At the present time there is loss of patellar reflex, muscular atrophy and the reaction of degeneration in both lower extremities, with double foot drop. The patient has very little power of motion in the lower limbs and the grasp of the hands is very weak. There has been no disturbance of the bladder or rectum and during the whole course of the disease very little loss of sensation.

CASE III.—For the notes of this case

I am indebted to Dr. John Ruhrah of the City Hospital. W. R., aged 28, developed typhoid July 25, 1895. Previous to this he showed signs of pulmonary tuberculosis. The disease ran the usual course of about five weeks. Bed sores developed and the temperature assumed a septic type. At this time appeared an intense hyperesthesia, most marked in the lower extremities. Paralysis of the extensor muscles of both arms and legs appeared, followed by marked atrophy. There was a gradual return of power, though the paralysis never entirely disappeared. The arms recovered more perfectly than the legs. The patient died from nephritis.

These cases illustrate the severer form of neuritis and there can be no doubt of the etiological influence of the typhoid fever. A point of very great interest and one which as yet is undetermined is whether inflammation beginning in a nerve trunk or in many nerve trunks may by direct continuity involve the spinal cord. Some cases of tabes are extremely suggestive of this possibility. If this could be established, if we could say with certainty that a neuritis from whatever cause may by a continuance of the inflammatory process eventually set up an inflammation in the spinal cord, then these post-febrile cases of neuritis become of very great importance.

A clinical fact worth noting, and one that has attracted my attention for some years, is that cases of neuritis may present very marked motor disturbances, amounting at times to complete paralysis, without showing any, or at least very trivial, sensory disturbances. This is brought out in the histories of two of the cases here reported. At one time I was inclined to think that there must be some anatomical explanation of this fact and made a number of experiments upon animals to ascertain whether the motor and sensory fibers maintained a definite course in the mixed nerve.

My experiments upon animals led me to conclude that there was no definite position assumed by motor and sensory nerve in the mixed nerve trunk, but that the fibers ran indiscriminately,

some sensory fibers being at the periphery, some in the center of the mixed nerve. Hence it followed that the explanation of the great difference shown in the loss of function of motor and sensory nerve after injury or disease is to be explained upon physiological rather than upon anatomical grounds.

Given a certain lesion of a mixed nerve trunk, the motor nerve is unable to perform its function properly while the sensory fiber conveys centripetal stimuli without difficulty. This unequal disturbance of function sometimes leads to the confounding of neuritis with poliomyelitis. Heretofore we have not attempted any active treatment of these cases, since nearly all of them recover

without treatment. If, however, we are to look upon neuritis as a possible forerunner of some degenerative disease of the spinal cord its importance is greatly enhanced. I am a firm believer in the great utility of electricity in the treatment of neuritis, local or general, and I think that careful electrical treatment greatly hastens the recovery in these cases.

Again, the general gain to nutrition by massage is of importance, having an indirect nutritive influence upon the diseased nerve trunk. The possibility of the etiological bearing of neuritis upon degenerative cord disease, and the necessity of more careful treatment of the former, is worthy of attention.

SOME HISTOLOGICAL POINTS IN NEUROLOGY.

REMARKS MADE IN A DISCUSSION AT THE CLINICAL SOCIETY OF MARYLAND,
OCTOBER 16, 1896.

By Lewellys F. Barker, M. D.,

Associate Professor of Anatomy, Johns Hopkins University.

IN connection with these interesting cases reported by Dr. Preston I may be permitted to refer to two or three histological points which have suggested themselves as he read. In the first place an entirely new conception of the nature and effects of neuritis is possible since the introduction of the neurone idea into the study of the nervous system. We know now that the axone (axis cylinder) of every nerve fiber is always a process of a nerve-cell; that what we used to designate as the nerve-cell together with its dendrites (protoplasmic processes) and axis cylinder processes with its terminals, represent taken together integral parts of a single cell of the body, a single neurone. It is not easy, therefore, to think of an injury to a nerve-fiber without assuming alterations in the structure and function of the whole neurone, of which the axone of the fiber forms a part.

Experiments on unicellular organisms, *e. g.*, amoebae, have shown that injury to one portion of the protoplasm leads to disturbances in the vital manifesta-

tions of the whole cell. If this be the case in what we are accustomed to look upon as simple, more or less undifferentiated protoplasm, it would not be surprising to find that injury to any portion of a nerve-cell, which represents, from the standpoint of irritability, the cell in the animal kingdom most highly differentiated, results in disturbances of metabolism and functional activity through all parts of the unit. We are not without experimental evidence upon this point.

Nissl has shown that if a peripheral nerve be cut, in addition to the Wallerian degeneration in the distal ends, and the changes demonstrated by Bregman, Darkschewitsch, Marinesco and others in the central ends of the nerve-fibers, that also, very early, definite changes occur within the cell-bodies of the corresponding neurones. Even if the nerve be not cut through but be simply injured by the application of the chemical substances, *e. g.*, common salt, nearly all the cell-bodies of the central nucleus giving rise to the fibers injured,

show within twenty-fours distinctly recognizable alterations.

These alterations consist in a modification in the appearance of the substances within the protoplasm of the cell-body which stain of a deep blue color by Nissl's method. There is some evidence, too, that injury to the dendrites of a given nerve-cell will affect the whole neurone deleteriously, and, of course, injuries to the cell-body itself are always followed by retrogressive processes in both dendrites and axone. One portion of a neurone, therefore, cannot be injured without influencing materially the health of the whole nerve unit. Inasmuch as an anterior horn cell with its protoplasm processes, its axone running out through the anterior root to form the axis cylinder of a motor nerve fiber together with the collaterals and terminals which come off from the latter, all represent parts of one neurone, it would not be surprising if in peripheral neuritis affecting especially the motor nerves that there should sometimes be symptoms referable to intramedullary disturbances. That permanent lesions of the spinal cord are not more common than they are after neuritis is not, however, surprising when one recalls the regenerative power of the neurone.

As long as there is no absolute interruption of the continuity of the axone or if there has been interruption and the subsequent conditions permit a reestablishment of the connections between the axone and its corresponding peripheral organ, there may be a complete *restitutio ad integrum* of the central parts of the neurone, and Nissl's experiments show that the stainable substance of the cell-body resumes its normal characters. The studies of Goldscheider and Moxter upon the way in which the tetanus poison reaches the spinal cord from a peripheral lesion are interesting in this connection, but I have time to mention them only and shall save further discussion for a future occasion.

Dr. Preston has referred briefly to the distribution of the motor and sensory nerves in the peripheral nerve trunks. I may say that physiological experiment has shown that the motor fibers of

one portion of a limb, *e. g.*, those for the flexors and extensors, are not evenly distributed within the nerve trunk leading to the limb, but are arranged in it, to a certain extent, at least, according to their functions, *i. e.*, according to the groups of muscles to which they are to be distributed. I was led in studying a case of elective sensory paralysis to the view that a similar arrangement may hold also for the sensory nerves. It would appear that in the peripheral trunks the nerves for the conduction of pain, pressure, warmth and cold may be arranged more or less according to the different paths which they have to follow on entrance into the spinal cord.

I can support Dr. Preston's view regarding the curious inequality in the action of the toxins upon the different portions of the nervous system. We have already a great mass of clinical and experimental evidence bearing upon this point. More than one toxine appears to be definitely elective in its action and the nervous diseases of apparently toxic origin support the view in their varying symptomatology. I need refer only to the researches upon the action of strychnine, carbon disulphide, alcohol, tea, etc., in this connection. This inequality is, however, what was to be expected rather than surprising, inasmuch as we must think of the members of the different groups of neurones and probably of the individual members of the same group as single organisms each with its own life history, each with its own metabolism, each with its own specific functions. It would, therefore, be a matter of great surprise did the same chemical substance act in precisely the same manner upon the different neurone-individuals. That the same groups of neurones may vary in susceptibility in different individuals is evidenced by the irregularities of the symptomatology in various intoxications. It is probable, however, that many of the curious irregularities of action are attributable to factors independent of the functionally irritable strychnines themselves, *e. g.*, those connected with the vascular supply.

A CASE OF CESAREAN SECTION, SUCCESSFUL FOR MOTHER AND CHILD.

READ BEFORE THE CHICAGO GYNECOLOGICAL SOCIETY, SEPTEMBER 25, 1896.

By Joseph B. De Lee, M. D.,

Lecturer on Operative Obstetrics, Northwestern University Medical School; Obstetrician to Mercy Hospital and to the Chicago Lying-in Hospital Dispensary.

MRS. F. was referred to me by Dr. P. T. Burns. She was born in Indiana and was called a "weakly child" in her first years. She learned to walk in her third year and for a long time had "weak ankles," so that she had to wear braces. There has always been something the matter with the right side of her body and she has noticed that the right hip and shoulder have been lower than the left. There is an indefinite history of some injury to the pelvis when the patient was a child. This needs further investigation. Menstruation began at seventeen years, was regular and normal; she married at twenty and is now over twenty-one years of age. The period of September 18, 1895, was normal in all respects. That of October was five days late, was small in amount and the flow lasted only two days. The patient had believed herself pregnant in October and this was the last "show."

Quickening was not noted, but the patient says it was about February 22, 1896. Reckoning according to the usual rule, confinement was to be expected August 1, and it is probable that the patient became pregnant very shortly before the menstruation of October 23.

Labor began August 1, 1896, at 2 P. M., the pains being few, the intervals long. At midnight they became stronger and ten minutes apart. Dr. Burns, the family physician, was sent for. The head was freely movable above the inlet and the doctor diagnosed a highly contracted pelvis. During the night the pains continued strong; in the morning the patient got some rest. At 2 P. M. the conditions were the same as they were during the night and at five, the pains growing stronger, but no advance in the labor being perceptible, Dr. Burns

invited me to see the case. Examination: Small (five feet and three-quarter inches), delicately built woman. The narrowness of the hips was especially striking. Slight scoliosis in the lumbar region, convexity to the right.

Pelvic measurements: Crests, 23; spines, 21.3; bitrochanteric, 26; circumference, 79; Baudelocque, 18; conjugata diagonalis, 10; C. V., estimated 8 centimeters.

The sacrum felt from the inside is straight, but the lower third projects sharply into the pelvis almost at right angles to the body of the bone. The pelvis is small, sides within easy reach of the finger; the linea innominata can be felt all the way round and there seems to be some asymmetry of the inlet; the right side is flatter than the left. The symphysis pubis is high, is displaced to the right side and presents somewhat of a beak, which can be grasped by the fingers on either side and is similar to that observed in osteomalacic pelvises. The horizontal ramus of the pubis on the right side runs straight backward; that on the left describes the usual curve. The vulva is displaced fully an inch to the left of the median line and looks forward and upward more than normal.

The crest of the ilium of the right side is straight; on the left the normal curve is retained.

The fetus lay occipito dextra posterior; heart tones above and to the right of the navel 140 per minute, loud and strong. The head was distinctly visible and palpable as a tumor above the pubes and, when pressed down upon the inlet, the head projected fully half an inch anterior to the symphysis. It was thus easy to put one branch of the pelvimeter on the head directly and get the intra-uterine length of the fetus. This was

twenty-six centimeters and a half and, according to Ahlfeld, the real length of the fetus was estimated at fifty-three centimeters. The oblique diameter of the fetal head was also very easy to take, measuring eleven centimeters and a half. These results were obtained so easily and so uniformly when repeated that I felt justified in using them for the diagnosis.

The cervix was effaced, the os admitting two fingers, head balloting on the finger. Bag of water intact.

Diagnosis.—A pelvis contracted in all its diameters. The inlet asymmetrically deformed and of an obliquely oval, possibly somewhat triangular shape. Signs of rickets. I first thought the pelvis came under the class of generally irregularly contracted rachitic pelvises, but since the operation, the idea of a Naegele pelvis—as the French say, "*oblique ovulaire*"—has come up. I hope to settle this by another examination.

The true conjugate was eight centimeters, but the available conjugate, owing to the irregular contraction, had to be estimated at something less than this. The child was at term (full) and larger than normal in size. It was evident that the spatial disproportion was so great that a living child could not be brought through the inlet by ordinary means. Had there been any room at the sides of the pelvis, prophylactic version and extraction might have succeeded in delivering a living child. This operation does not give good results in generally contracted pelvises. There were three courses of treatment open to us:

1. Expectancy, a trial of forceps and craniotomy on the living child as a last resort.
2. Symphysiotomy.
3. Cesarean section from the relative indication.

The pelvic deformity, the size of the child's head, decided the first. Expectancy meant craniotomy, and craniotomy should not be done on the living child if the conditions are favorable for Cesarean section.

Symphysiotomy did not offer any bet-

ter chances than Cesarean section. A tight vagina and vulva, a necessary great spreading of the bones, especially as in this case the pelvis was obliquely contracted, the integrity of the sacroiliac joints came seriously into question, the after-effects of such a severe disruption of the whole osseous system, which I believe occur more often than are published, must make one cautious in selecting this as a primary operation.

It was, therefore, decided to propose Cesarean section; in the event of her refusal, expectancy, forceps, craniotomy.

The points were put before the patient and her husband unvarnished, and the operation guaranteeing the life of the child accepted.

The patient was removed to Wesley Hospital, and arrived there at 11.30 P. M. Everything that was to come in contact with the patient was boiled one and a half hour, even though it had been sterilized before, and there were only two pairs of hands in the work—my assistant's, Dr. F. X. Walls, and my own.

Dr. I. A. Abt was to undertake the resuscitation of the child; Dr. Zimmerman, interne, gave the anesthetic (chloroform).

Dr. Burns, Dr. Van Hook, Dr. Byrne and Dr. Van Velsor were present.

The classical Cesarean section was done, it being neither indicated nor desired to do a Porro operation. The vagina was thoroughly douched with one per cent. lysol solution, the abdomen prepared as usual for laparotomy, and an incision made in the linea alba involving the two middle quarters of a line drawn from the fundus uteri to the pubis.

The uterus was drawn out of the abdomen by the left horn, a large sponge (gauze) placed beneath it, and Dr. Walls compressed the lower uterine segment with both hands.

The uterine incision was begun in the middle of the anterior surface of the fundus, and bled so profusely as to lead to the suspicion that the placenta was situated there, so an elastic ligature was placed around the cervix. The incision in the uterus, which, however,

did not touch the placenta, was enlarged with scissors to four inches, and the child quickly extracted on one foot. It was apneic, not asphyxiated, and came around easily.

The uterus contracted tardily. The placenta, which was partly separated, was peeled off, and membranes removed complete by gentle traction. The hemorrhage was quite profuse, coming from the placental site as well as the wound, so the uterus was freely mopped with hot sponges, and gently slapped with a hot, wet towel.

Sutures were now placed — deep muscular sutures of No. 8 silk — down to the decidua, of which twelve were put in, and over this a Lembert suture of fine silk, continuous, and interrupted every inch.

Hemorrhage now ceased competely; the peritoneal toilet was made, there being very little fluid in Douglas' *cul-de-sac* and the utero-vesical pouch.

The abdominal wound was closed in two layers — one, using silk, involving peritoneum fat and the fascia; the upper, of silkworm gut, taking in the skin, the subcutaneous fat, and in part the fascia. The first was in part continuous, the latter interrupted. Iodoform and sterilized gauze dressing. The patient was now catheterized and put to bed in good condition, with pulse 108.

The subsequent course of the case was uneventful. Eighteen hours after the operation temperature reached 100° F., but after this the highest was 99.8°. The pulse was 108 after the operation, but decreased gradually, till on the twelfth day it was 46 per minute. The

diet was as usual after laparotomy. It was difficult to get the bowels moving, but flatus passed freely; so there was no uneasiness in this direction. The stitches were removed on the eleventh day with primary union throughout. There was considerable odor to the lochia in the second week, for which a little iodoform emulsion was injected into the vagina. This had no effect, and, since the patient had no other symptom, the condition was treated no further.

The baby — a girl — at birth weighed seven pounds and a half, and presented the following measurements: Length, 53.5 centimeters; biparietal diameter, 10.2; bitemporal, 9; suboccipito-bregmatic, 9.8; occipito-frontal, 12; oblique, 11; occipito-mental, 13.4; bisacromial, 11; bisiliac, 9.5. Circumferences of head: occipito-frontal, 35; suboccipito-bregmatic, 33.25 centimeters. The head was hard, the sutures and fontanelles almost closed — a head that would have conformed with difficulty even to a normal pelvis.

These measurements agree remarkably with those taken while the child was *in utero*. The length of the fetus had been estimated at 53 centimeters, and the diameter of the head 11.5 centimeters. There existed a difference of only half a centimeter in each.

The child was put to the breast immediately, and, with the exception of a little fever and diarrhea, the first few days grew visibly, gaining almost a pound a week.

The mother and child left the hospital on the twenty-fourth day, both in excellent condition.

NEW METHOD OF ARTIFICIAL RESPIRATION. — Calliano (*British Medical Journal*) describes a new method of artificial respiration which he has practiced with success in cases of asphyxia. The patient is placed in Sylvester's position and the arms are then drawn up so as fully to expand the thorax, and then fixed above and behind the head by tying the wrists together. In this position respiration is induced by simply

pressing with the hands on the thorax some eighteen or twenty times a minute. The advantages claimed for this modification of Sylvester's method are, (1) its greater simplicity; (2) the much smaller amount of labor required, and lessened fatigue of the operator; (3) the absence of danger from contusion of the shoulder joints; (4) the ease with which such a method could be taught to and practiced by uneducated and untrained people.

Society Reports.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD OCTOBER 16, 1896.

THE 326th regular meeting of the Clinical Society of Maryland was called to order by the President, Dr. S. K. Merrick.

Dr. George J. Preston read a paper on A REPORT OF THREE CASES OF POST-TYPHOID NEURITIS. (See page 55).

Dr. W. D. Booker: I would like to report a case, which I saw last summer, of painful points coming on in different parts of the body during the anemic condition following typhoid fever. These spots would occur without any perceptible cause whatever. The first point noticed was in the big toe and caused considerable lameness. It disappeared within twenty-four hours as suddenly as it had come. The next point appeared in the small of the back, coming on just after breakfast and disappearing sometime in the afternoon. The next and most severe of all was between the ribs and lasted for a week. It was of such a character that we suspected pleurisy, but we could find no signs on auscultation. The pain was severe on deep inspiration and coughing was almost impossible. The next point appeared just in front of the heel on the outside of the foot and lasted about twenty-four hours, disappearing suddenly. Then the heel itself was affected. These attacks were from four to seven days apart. The only reappearance since September occurred night before last when the pain came on again in the big toe and was so severe as to prevent sleep. In the morning there was some swelling about the toe, but when he commenced walking it all disappeared.

The discussion then turned upon typhoid fever in general.

Dr. Simon Flexner spoke of mixed infections: I became interested in this subject during three or four years of opportunity to study the most unpleasant cases of typhoid fever, from this point of view, namely: those that came to autopsy. They are not interesting to

physicians except to look back upon. I became impressed with what was not a new thought, but which was a growing one, that typhoid fever does not always run its course as a simple infection. There occur sometimes symptoms that point to septic infection of a different character from that of typhoid and I think we have now a definite pathological basis for such an opinion. The intestines contain a large flora as you know in life. We have to deal particularly with the pus-producing bacteria, and these are such constant inhabitants of the intestines that we can readily understand how that typhoid fever being on hand, they may become important factors, the conditions of typhoid being favorable to the increase of these organisms. It is especially when they leave the intestines that we have to deal with mixed infection as such, when they get into the peritoneum, spleen or mesentery glands and cause there suppurative processes. Such inflammatory processes I think are very seldom due to the bacteria of typhoid, the pyogenic organisms being usually the cause. These are then the cases of mixed infections, *par excellence*, where we have to deal with a combination of effects partly due to the typhoid germs and partly due to the pyogenic organisms. There are cases of actual septicaemia of pyogenic origin which are associated with typhoid fever. A French writer has laid stress upon this point as to how it increases the seriousness of the prognosis. We have had some cases of blood infection where cultures were made during life. The typhoid fever germ so rarely getting into the blood and increasing there it is difficult to obtain them, but the pyogenic bacteria found there may be cultivated. The presence of pyogenic organisms in the blood need not be so alarming as we once thought; we are so accustomed to think of these things as we see them in the laboratory. It causes death of the animals used thereby overwhelming them, but during the past winter we have come across cases where the blood cultures gave pyogenic bacteria and yet after the evacuation of the local accu-

mulation of pus and careful and clean treatment the bacteria in the blood disappeared and the cases recovered.

Dr. J. H. Branham: I should like to relate, from a clinical standpoint only, a case which came under my charge this summer. Patient was a man of forty-one years, large and strong, and I saw him on the 13th of August when he had been sick about one week. Up to that time he was supposed to have been suffering from malaria. When I first saw him the prominent symptom was a small quantity of bloody urine with large amount of albumen. The temperature was very irregular, of a typical typhoid character, and later other symptoms of typhoid fever developed so distinctly that I think there can be no doubt of this diagnosis. For the first few days the temperature ranged from 103 to 105. The ordinary diuretics were given at first with cold sponges and after a few days the kidneys began to secrete again. Up to the 25th the patient did well. At that time he showed indications of phlebitis in the right leg, which increased and gradually extended downward until the limb was swollen from Scarpa's triangle to a point a little below the knee. The temperature, which had gone down nearly to normal a few days before this, again began to rise.

The ordinary treatment for phlebitis was followed, but on the second of September, in spite of the cold sponges, his temperature was 105° and his condition critical. Cold baths were given but not as regular as we would wish because of the patient's actions. The patient became completely comatose, his veins became somewhat softer, but his condition was so bad that I concluded that he could scarcely recover without operative intervention. I opened the vein and found some pus mixed with a large amount of clotted blood. Two openings were made, one in the upper part of the thigh, and another below the knee, and the vein was washed out antiseptically. The phlebitis seemed to extend into the pelvis. After the operation the patient improved very rapidly, became conscious again, and his temperature went down to 100 or less. I thought he was

going to get well, but about four days later he became comatose again, and, although there was no recurrence of the symptoms, there was some swelling below the knee and on the night of the 7th he died. There had been no physical signs of heart trouble. I suppose the sepsis had extended to some of the internal organs and death was due to that. This patient had suffered from phlebitis of the same limb twice before, the last attack occurring two or three years ago. The final attack occurred near the end of the third week of typhoid.

Dr. George J. Preston: I would just make one observation in regard to the cases we have seen at the city hospital this summer. We have had four well marked cases during that time and two last summer of mixed infection, which is, I think, a remarkable record. None of them went to post-mortem, and whether they were typhoid, of course, I cannot prove, but clinically, they were typical cases. In all the malarial organisms were present and continued for several days after the administration of quinine and even ran the typical typhoid course. We have had perhaps 25 or 30 cases in the hospital since spring and four cases of mixed infection is certainly a large proportion. I have been astonished with the frequency that malaria has complicated everything this summer. I have not seen before so much as this year.

Dr. Simon Flexner: Without knowing the statistics exactly I should agree with what Dr. Preston has just said that the proportion of mixed malarial infections this year is unusually high.

H. O. REIK, M. D., Secretary.

THE PHONENDOSCOPE.—Dr. Manges exhibited before the New York Academy of Medicine the phonendoscope of Bianchi and explained its principle. He seemed to think it offered no especial advantage over the ordinary stethoscope in examining the heart and lungs and that it did not do what its inventor claimed. This does not agree with the testimony of Dr. H. B. Baruch in the *Medical Record*.

CHICAGO GYNECOLOGICAL AND
OBSTETRICAL SOCIETY.

MEETING HELD SEPTEMBER 26, 1896.

Dr. Joseph B. De Lee read a paper entitled A CASE OF CESAREAN SECTION, SUCCESSFUL FOR MOTHER AND CHILD. (See page 59.)

Dr. C. S. Bacon: There is nothing but favorable criticism to be made of the report of the case except the lack of data for a more accurate determination of the character of the pelvis. There is considerable difference of opinion as to the value of measurements, but their aid should not be entirely overlooked in a case of obliquely contracted pelvis. Among the measurements recommended by Naegele those of the distance between the posterior spines and the anterior spines of the opposite side, as well as the distances between the ischial tuberosities and the opposite posterior iliac spines, are the most important. The description that was given seems to point toward a Naegele pelvis. If it is a Naegele pelvis, it is interesting on account of the etiology. A rachitic condition has no influence in the production of a Naegele pelvis and the question of inflammation of the sacro-iliac joint as a possible result of the fall comes into consideration. If it was a Naegele pelvis, with ankylosis of the sacro-iliac joint, then the question of symphysiotomy is entirely ruled out. Mobility of both sacro-iliac joints is a necessary condition of this operation. Consequently the choice of operation was such as everyone must agree to. There being no infection, there is no question as to which operation should be done—the Porro or the conservative section. There are perhaps two points that might be discussed relative to the operation. One is removing the uterus from the abdominal cavity before emptying it. The contents of the uterus were not infected at all, and hence the removal of the uterus from the abdominal cavity was not indicated. When we have reason to fear that the contents of the uterus are infected then it should always be removed, so as to prevent, if possible, any of the contents getting

into the abdominal cavity; but here it would seem possible to have opened the uterus and removed the child without taking the uterus out and it would have made a somewhat easier operation. It is a question whether hemorrhage, which may be somewhat profuse, can be as easily controlled with the uterus in the abdominal cavity and I suspect that nearly everyone who had not operated several times might be tempted to first remove the uterus before opening it, because of the better facility for controlling the hemorrhage.

The next question is that of the elastic ligature. Saenger first, and later many others, have shown that the application of an elastic ligature certainly tends to an increased amount of hemorrhage and, where one has efficient assistants to control the uterus, the elastic ligature is not necessary and is liable to lead to trouble afterward.

The sewing up of the uterus, as well as the closure of the abdomen, was done well, as is proved by the result. The greater security promised by method of sewing the uterus in four stages or rows of sutures, as proposed by Professor Senn, might well have been considered in this case, where a rapid ending of the operation was not called for.

I have only one word more to say, and that is in regard to the management of the lochia. It is curious how the lochia should have become offensive, because the vagina was first well cleaned and the entire placenta and membrane were removed. But so long as it did not become offensive and there were no other symptoms, I think there is no question that Dr. De Lee did right in not doing anything further. His practice conforms to the rule which is now commonly adopted, that interference with the interior of the uterus in a case of simply bad-smelling lochia, where there are no other symptoms, is not indicated.

Dr. Etheridge: I wonder why the medical profession does not take into serious consideration the removal of the ovaries as a classical part of the procedure of Cesarean section in a woman like this, preventing any other conception. Here is a woman who is malformed, and

sociologists will tell us that we are just turning her loose on the world to beget other perverts physically, and I would like to know why the idea should not be advanced and encouraged of complete oöphorectomy in these cases, or removal of the tubes at any rate, thus preventing her from conceiving in the future. I think the next case of Cesarean section I have I shall seriously discuss that question with the mother and father before operation.

Dr. J. A. Lyons: I have little to say except to commend Dr. De Lee for the excellence of his paper and for the manner in which he prepared for and carried out the operation. It was indeed done in a masterly manner. Dr. Etheridge's suggestion calls to mind a case I had some years ago. I was called by the family on the 4th of July, because of an accident to the young lady's brother, and while there I noticed that one of the daughters had a deformed pelvis, and advised the mother either to have ovariectomy performed or not allow her child to marry. They thought over the matter for some time, and were considerably worried, but did nothing. In the course of two years the girl married and almost immediately became pregnant. The deformity was so bad, however, that the fetus could not grow to any extent. The promontory of the sacrum came within an inch and a half of the pubes.

The uterus in growing seemed to elongate entirely; the cervix at the time she miscarried, at about three and a half months, had lengthened out to two or three inches, and it was with very great difficulty that the fetus was removed at that time. However, we cannot always figure on having such a difficult time in these cases. I was engaged some two months ago to confine a woman whom I thought was deformed about as badly as anyone could be, and I was prepared for almost any procedure, especially as it was her first child. She had but one pain, and the child was delivered without trouble.

Dr. M. L. Harris: It seems to me Dr. De Lee has not presented sufficient reasons for selecting the more serious

operation of Cesarean section in preference to symphysiotomy in this case.

A conjugata vera of eight centimeters is supposed to come well within the limits of symphysiotomy, and yet he states the question of it being a Naegele pelvis did not come up until measurements made some time after the birth. Of course, he could not consider the smallness of the vagina in a primipara as an indication for Cesarean section.

The injurious effects of symphysiotomy on the sacro-iliac joints mentioned does not seem to be borne out by statistics.

In a recent paper by Ayers on the after-effects of symphysiotomy in seventy-three American and Canadian cases, he has shown that no serious injury to the sacro-iliac joints or the symphysis occurs.

From the evidence presented, I think a symphysiotomy would have been proper to consider in this case, as it should have the preference over a Cesarean section when possible.

Dr. J. B. De Lee (in closing): I am very much pleased at the tenor of the discussion, and will say in answer to Dr. Bacon about the shape of the pelvis that I have not yet made a diagnosis as to the pathology of the pelvis, but I have a very clear conception as to the nature of the deformity. The pelvis is oval, almost triangular, and this can be caused by osteomalacia, by rickets and by disease in the sacro-iliac joints, either congenital or acquired, the so-called Naegele pelvis. Which of these it is I do not know; both of them may be present. Kleinwächter showed a pelvis that was exquisitely rachitic, and also a Naegele pelvis. In regard to the operation itself, I confess the reason I rolled out the uterus was simply to make the operation easier. After I have had a little more experience in Cesarean section I believe I will leave the uterus in the abdomen unless it is infected. However, I think in this case rolling the uterus out helped to stop the hemorrhage, which was quite severe.

Regarding the use of the elastic ligature, I knew very well at the time the

objections to it. I gave the uterus into the hands of my assistant to control, but he was new to the operation and did not successfully compress the lower uterine segment. The ligature was not in place more than a minute or two, as immediately after the child was delivered I unclamped the forceps and removed the ligature.

In answer to Dr. Etheridge's suggestion about ovariectomy in these cases, I certainly think it should be considered. This woman is deformed, and may produce deformed children, although this child presented all the signs of a well-developed healthy infant. Another point in performing ovariectomy and Cesarean section: one does not like to increase the mortality of the operation, and anything that will take more time or involve the use of more ligatures will certainly raise the mortality somewhat.

In regard to performing symphysiotomy in preference to Cesarean section, the last statistics to which I have had access show a mortality from symphysiotomy of ten to twelve per cent., while Cesarean section performed in such favorable cases as mine gives a percentage of eight per cent. (Leopold), or even less.

I said a tight cervix and vagina are an objection to symphysiotomy and a point in favor of Cesarean section. Edgar of New York says the danger of symphysiotomy lies as much in the soft parts as in the bony pelvis. The cervix, the vagina and perineum are likely to be torn by the rapid extraction, and, on the other hand, the child can be injured or will die during the extraction, rendered difficult by the resistant soft parts.

Anyone who has had to deliver a child rapidly through a tight vagina and unprepared perineum knows how difficult an operation it is. I need only refer to a breech presentation in a young primipara.

A conjugata vera of eight centimeters is not an indication for Cesarean section in a flat pelvis. Here one can usually deliver by version and extraction. But in a generally contracted pelvis a con-

jugata vera of eight centimeters and a half allows the Cesarean operation. This is especially true when the pelvis is obliquely contracted, because the available conjugate is smaller still.

Regarding the integrity of the sacro-iliac joints, we have no way of determining their mobility. Results obtained by putting a finger in the rectum and then abducting the thighs, or having the patient stand first on one foot, then the other, as the Germans do, are entirely illusory. In all obliquely contracted pelves we must suspect the integrity of these joints. I can show large numbers of obliquely contracted rachitic pelves with osteitis around the joints which would seriously cripple their mobility.

T. J. WATKINS, M. D.,
Editor of Society.

Medical Progress.

WOMAN AND HER DISEASES, *vs.* GYNECOLOGY.—Dr. Henry P. Newman of Chicago has been much impressed with the trend of all forms of treatment towards preventive medicine. We should not be too ready to operate when hygienic measures will benefit. His conclusions, which are tersely stated in the *American Gynecological and Obstetrical Journal*, are as follows:

1. As gynecologists we must recognize and exercise the rising interest in a medical science which shall be preventive rather than curative.

2. Our affiliations should be with the general practitioner and obstetrician rather than with the specialist in surgery, who often lacks the special training necessary to an appreciation of the many disease-manifestations in woman, their etiology and prophylaxis.

3. As we have long made a study of the pathology and etiology of women's diseases, and as we know that whatever may be acquired can be prevented, our specialists are best qualified to lead in the movement for the reform of all conditions detrimental to the health of modern women.

4. To repeat, my title is not in any

way an indictment against our great division of the science of medicine, but an attempt to bring forward the claim of the human interests of woman's life in all its issues as opposed to a colder, more purely scientific, and more mechanical, interest in the pathology of the female pelvic organs.

* * *

ENUCLEATION OF THE EYE UNDER COCAINE.—Michael Mohr (*British Medical Journal*) records five cases of enucleation of the bulb under cocaine. The drug was used in 5 per cent. solution, and was dropped repeatedly into the conjunctival sac till the eye was insensitive. The operation was then rapidly performed and was quite painless. One of the patients was an old man, aged 84, emphysematous, and with a hypertrophied prostate; the heart was much dilated and there was some cystitis, so that the administration of a general anesthetic would have been a very serious matter. The eye trouble was glaucoma. Another glaucoma case treated with equal success was in a child of eight months; the glaucoma was here secondary to tuberculous iritis.

* * *

THE SURGICAL TREATMENT OF FOCAL EPILEPSY.—Drs. B. Sachs and A. G. Gerster report in the *American Journal of the Medical Sciences* nineteen cases of focal epilepsy treated by surgical interference, from which they conclude that—

1. Surgical interference is advisable in those cases of partial epilepsy in which not more than one, or at the utmost two, years have elapsed since the traumatic injury or the beginning of the disease which has given rise to the convulsive seizures.

2. In cases of depression or other injury of the skull surgical interference is warranted even though a number of years have elapsed; but the prospect of recovery is brighter the shorter the period of time since the injury.

3. Simple trephining may prove sufficient in a number of cases and particularly in those in which there is an injury to the skull or in which a cystic condition is the main cause of the epilepsy.

4. Excision of cortical tissue is advisable if the epilepsy has lasted but a short time and if the symptoms point to a strictly circumscribed focus of disease.

5. Since such cortical lesions are often of a microscopical character, excision should be practiced even if the tissue appears to be perfectly normal at the time of operation; but the greatest caution should be exercised in order to make sure that the proper area is removed.

6. Surgical interference for the cure of epilepsy associated with infantile cerebral palsies may be attempted, particularly if too long an interval has not elapsed since the beginning of the palsy.

7. In cases of epilepsy of long standing, in which there is in all probability a widespread degeneration of the association-fibers, every surgical procedure is useless.

* * *

ABSOLUTE ALCOHOL AS A DISINFECTANT FOR INSTRUMENTS.—Dr. Robert L. Randolph has found that for the disinfection of delicate eye instruments nothing is better than absolute alcohol. The results of his experiments, as recorded in the *Johns Hopkins Medical Bulletin*, convince him—

1. That in a given number of eye instruments, by far the majority are infected by exposure to the air.

2. That absolute alcohol would seem a valuable disinfectant for instruments infected under the conditions which ordinarily surround us in every-day life. This conclusion seems warranted by the results obtained in the first and second series of experiments. Attention may be called to the fact, too, that in the second series the nails were all without a doubt infected and it might be said that they had been exposed to conditions which, to say the least, were extraordinarily favorable for infection, so that this series is strongly suggestive that alcohol possesses disinfectant properties of no little value.

3. That the septic character of instruments infected with a pure culture of staphylococcus albus is not altered by exposure for twenty minutes to the action of absolute alcohol.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, NOVEMBER 7, 1896.

ALL preparations for the semi-annual meeting of the Faculty at Hagerstown, next Tuesday, are completed. The programme which was published in these columns last week and which has been sent out by the programme committee will be followed about in the order printed.

Dr. J. W. Humrichouse, president of the Washington County Medical Association, will deliver the address of welcome, which will be responded to by Dr. William Osler, president of the Faculty. Dr. Hiram Woods, who is set down for a paper on otitis media with complications, will probably substitute for this paper a short report on the results of the eye examinations of the public school children of Baltimore, and if possible he will show the new adjustable school desk which has been recommended.

The profession of Hagerstown with its well-known cordiality and hospitality has insisted on entertaining the visiting profession at a reception and banquet Tuesday night. From

the number of personal invitations sent out and the activity of the president and other officers of the Faculty in completing arrangements, this will probably be an especially interesting and well attended meeting.

The programme is almost too long if carried out to the letter, but it is more than likely that some papers announced will not be read and others will be short. The time allowed for each paper and report is fifteen minutes and members are earnestly requested to keep within bounds. In view of the amount of typhoid fever in the State of Maryland, it is likely that the discussion of that subject will elicit much interest and information.

All members of the profession are invited to attend the meeting whether members of the Faculty or not, and those who have nothing to say will derive much benefit from the topics discussed and will enjoy the renewing of old acquaintances and the making of new ones. These breathing spells in the busy life of the physician and the social intercourse at these meetings tend to knit the profession of Maryland more closely together and make lasting friendships.

* * *

In these cold, hard, practical days at the end of the nineteenth century, the physician is obliged to look to the business side of his profession. *The Business End of It.* Dr. George W. Miles asks in the *Medical News* why it is not right to consider the financial side of the calling and consider "how much there is in it."

Physicians are as a class poor men and in proportion to the amount of money invested in their education they yield very small returns, with some few notable exceptions. They are poor financiers and at the end of a busy life too often leave their families in needy circumstances. In a list of millionaires recently published the name of no physician appears. Even a comparison of fees, as Dr. Miles says, shows that the lawyer receives much more than the physician for the same amount of work.

The physician is not a business man and it is hard to make him take up business methods, and yet when his own bills come due he is expected to pay them as anyone else should do. Many causes operate to keep the physician poor, and chief among them is the

overcrowded profession, the dispensary and hospital abuse and the unbusiness-like methods pursued by most physicians, who have trained the people not to pay a bill for medical service if it can possibly be avoided.

A marked exception to this statement is the following notice published by the profession of a small town in Kentucky and signed by every physician except one :

"WHEREAS the merchants and other business men of Stanford have adopted the *cash system*, we, the physicians of this community, ask and demand that our bills in the future shall be paid every thirty days, in cash, its equivalent, or a note, negotiable and payable in bank, with legal interest, and due when services are rendered. Persons now owing us for past professional services must come forward and settle at an early date. There is a business as well as professional side to the practice of medicine and surgery, which we are determined to observe in the future."

Physicians do much more good than they formerly did if they keep up with the times, and so much the more should they be paid promptly. The old idea that physicians are put into the world to do good should not be lost sight of but the rewards for this good should not be forgotten. It is only in isolated communities that such a system as that introduced by the Stanford physicians could be adopted.

In large cities it would be impossible to make the physicians agree on any method of business for the common welfare. In every trade and profession there is an organization, and usually more than one, that takes care of the general welfare of that calling but in medicine the medical societies pay little attention to the business side of medicine beyond a certain point.

The business side of medicine in these days of money famine needs to be considered by physicians, and because in old times physicians sent no bills or sent them but once a year that is no reason why payment for services should not be demanded at short intervals or even at the time the service is rendered, as is the case in some countries.

Dr. Miles has conferred a benefit on physicians by making public his article and if physicians would profit by his teachings they might in many cases be better able to pay their own debts and have a better standing in the community.

THE new State Board of Health with its new secretary has found plenty of work in the State. The prevalence

The State Board of Health. of typhoid fever in Baltimore and throughout the

State of Maryland has been the subject of comment for some years past and many have been the attempts to find the exact cause and remove it.

At the coming meeting of the State Society at Hagerstown a large part of one session will be devoted to the discussion of typhoid fever and it is to be hoped that more practical results will be attained than such discussions have hitherto brought forth.

The City of Baltimore may examine and condemn sub-standard milk within the city limits but it has no power to go beyond these limits and examine and condemn the country dairies which send in poor milk. This the State Board of Health has authority to do and should pursue such work to the end without regard to personal or political feeling.

As stated last week, the Board has about five thousand dollars at its command, with an emergency fund of about ten thousand dollars in case of epidemic. Some other fortunate States have as much as \$200,000 and \$300,000, and even more, and yet complain that they need more money. If Maryland could have use of its emergency fund it could arrest promptly such outbreaks of disease as have occurred of late, and burn and destroy all infected property, but certain forms are necessary for obtaining this money and it must be proved that the disease present is an actual epidemic and not a mere outbreak only, and while waiting for this the disease goes merrily on.

There has been, too, up to the present time, what may be perhaps called a lack of harmony throughout the State among the general and local health officers so that there was lack of coöperation. A convention of State health officers in Baltimore would be a most excellent idea and it is proposed to carry out this plan. The main objection is that there is no money provided for expenses and physicians are not willing to leave their distant homes and come to Baltimore at their own expense.

The new State Board of Health has a large opportunity before it and good practical results should come from its plans.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending October 31, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		20
Phthisis Pulmonalis.....		16
Measles.....	2	
Whooping Cough.....	5	3
Pseudo-membranous Croup and Diphtheria. }	22	5
Mumps.....	1	
Scarlet fever.....	21	
Varioloid.....		
Varicella.....	2	
Typhoid fever.....	23	1

Koch is studying leprosy.

The seventh Italian Congress of Medicine was held at Rome last month.

The Southern Surgical and Gynecological Association will meet in Nashville, November 10, 1896.

Dr. Jean Charcot, son of the celebrated Charcot, is to marry the granddaughter of Victor Hugo.

Queen Victoria has appointed Thomas Bryant, F. R. C. S., Surgeon Extraordinary to Her Majesty, to succeed the late Sir John Eric Erichsen.

The daily papers are responsible for the statement that the large insurance companies are building sanitariums to take care of their bad risks.

The Medical and Chirurgical Faculty of Maryland will hold its next semi-annual meeting at Hagerstown, Maryland, November 10 and 11. The profession is cordially invited to attend.

Dr. Thomas L. Stedman of New York, one of the editorial staff of the *Medical Record* and so well known as editor of the Twentieth Century Practice of Medicine, has just issued through Harper & Brother a book entitled "Modern Greek Mastery."

On the seventeenth day of October Hospital Day was celebrated at St. Luke's Hospital, South Bethlehem, Pennsylvania. On this occasion Dr. Henry Dwight Chapin of New

York delivered an address and a class of nurses was graduated from the training school.

A doctor in the Highlands of Scotland, whose patients are scattered over a wide district, takes carrier pigeons with him on his rounds and sends his prescriptions by them to the apothecary. He leaves pigeons, too, with distant families, to be let loose when his services are needed.

According to the *Universitätskalender* just issued, the number of students in the medical faculties of the several German-speaking universities during the last summer semester was as follows: Munich 1502, Vienna 1370, Berlin 1118, Würzburg 730, Leipzig 658, Graz 468, Freiburg 458, Erlangen 411, Greifswald 378, Kiel 368, Breslau 323, Bonn 314, Zürich 303, Strassburg 295, Göttingen 257, Marburg 247, Königsberg 232, Geneva 231, Heidelberg 227, Halle 215, Tübingen 214, Jena 211, Gießen 181, Bern 179 and Rostock 115.

The death of Professor H. Newell Martin, formerly Professor of Biology at the Johns Hopkins University, is announced from England. Dr. Martin came to this country from Cambridge to organize the biological and physiological departments of the Johns Hopkins University in 1876. He was one of the greatest scholars in the world in his branch, not only contributing valuable monographs and books, but training young men who have since become famous. Dr. Martin attained eminence very young and when he retired from the Johns Hopkins University in 1893 on account of ill health, he was under forty-five years of age.

At the regular monthly meeting of the trustees of the Johns Hopkins University held last Monday night two promotions in the faculty were made. Dr. Lewellys F. Barker, assistant in anatomy at the Johns Hopkins Medical School, was raised to the rank of associate professor of anatomy. Dr. Barker graduated with the degree of bachelor of medicine at the University of Toronto in 1890. He took up graduate work in pathology and held a fellowship from 1892 to 1894. Dr. William S. Thayer, associate in medicine at the Medical School, was also raised to the rank of associate professor. Dr. Thayer is a Harvard man, having graduated there as a bachelor of arts in 1885, and doctor of medicine in 1889.

Book Reviews.

A PRACTICAL TREATISE ON MATERIA MEDICA AND THERAPEUTICS. By Roberts Bartholow, M. A., M. D., LL. D., Professor Emeritus of Materia Medica, General Therapeutics and Hygiene in the Jefferson Medical College of Philadelphia, etc. Ninth edition, revised and enlarged. New York: D. Appleton & Co., 1896; pp. 866. Price \$5.00.

Former editions of this excellent work have already been noticed in these columns. It contains a description of the newer materia medica which is the result of the rapid development of pharmacology. Many well-known synthetical proprietary medicines whose physiological effects have been studied are also mentioned. These are such as ingluvin, ferratin, hemol, hemo-gallol, dermatol, iodol, loretin, nosophen, europfen, soziadol, aristol, airol, alumnol and a host of others. The rest of the work is little changed from former editions. This book will always continue to be a favorite with physicians and students.

AN AMERICAN TEXT-BOOK OF PHYSIOLOGY. Edited by W. H. Howell, Ph. D., M. D., Professor of Physiology in the Johns Hopkins University, assisted by ten Professors of Physiology in American Medical Schools. Fully illustrated. 1050 pages. Price, cloth, \$6.00; sheep, \$7.00. For sale by subscription only. W. B. Saunders. Philadelphia. 1896.

The collaborators in this work are Henry P. Bowditch, M. D., John E. Curtis, M. D., Henry H. Donaldson, Ph. D., W. H. Howell, M. D., Ph. D., Frederick S. Lee, Ph. D., Warren P. Lombard, M. D., Edward T. Reichert, M. D., and Henry Sewall, M. D., Ph. D. This large work has been written because the authors believe there is no book now in use that represents our present ideas in physiology. It is impossible in this space to criticize thoroughly every change, but suffice it to say that the advantage of the varied knowledge and the different views of the authors are apparent in this text. The bibliography is very complete. It is an advanced work and better adapted for the graduate student or for use in the best schools.

REPRINTS, ETC., RECEIVED.

A New Operation for Certain Cases of Procidencia Uteri. By Charles P. Noble, M. D. Reprint from the *American Gynecological and Obstetrical Journal*,

Current Editorial Comment.

THE EXCESSIVE USE OF DRUGS.

Charlotte Medical Journal.

WITHOUT doubt a large number of physicians in the general practice of medicine prescribe drugs largely in excess of what is really necessary or beneficial for the relief of their complaints. There is not a shadow of a doubt that many patients would obtain relief much quicker with half the amount of medicine that is sometimes administered. If a drug is not necessary for a certain case, it is of necessity an injury.

SPECIALTIES.

Canadian Medical Review.

THE search for specific methods of treatment is claiming much attention. Great advances have been made in the case of diphtheria. It must be now admitted that a thorough series of tests have yielded an affirmative answer as to the value of antitoxine. In the case of tuberculosis much is being done, both in the line of prevention and cure. Twenty years ago but little was heard of contagium vivum; now it is taking first place in medical thought, and leading to some all important discoveries, as witness the comparative ease with which the onward march of epidemic cholera can be arrested.

IT PAYS TO TAKE YOUR OWN JOURNAL.

Medical Sentinel.

IF you desire to know what your neighbors are doing in the practice of medicine, or to have them know what you are doing, it pays to take your home medical journal. If you wish to read articles upon the latest medical subjects, written by those in your own vicinity, and to learn what is being done by those about you with the recent advancements in medicine, you must be pleased with your local medical journal, and will not do without it. If you desire to be informed concerning what the medical societies in your own and neighboring States are doing, you cannot get along without it. Your own journal is the only periodical which has any special interest in local matters, and nowhere else will you find a history of medicine in your own locality. Your local journal has an interest in you, for you belong to the brood that finds warmest welcome under its wings.

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	...	...	...	...	...
...

DECEMBER						
S	M	T	W	T	F	S
...	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	...	...	...
...

State Societies.

NOVEMBER.

- 10-11. MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, at Hagerstown.
 27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.
 16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
 BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
 CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
 GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
 MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
 MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
 THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.
 THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
 THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 2d Friday and 4th Monday, at 8.15 P. M.
 MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
 UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
 MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LEWELLYN ELIOT, M. D., Secretary and Treasurer.
 MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
 MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
 WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.
 WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PHARMACEUTICAL.

I HAVE been prescribing Peacock's Bromides for the past five years with pleasure to my patients and much satisfaction to myself. I prescribe it in all cases where bromides are indicated and have derived better results with Peacock's Bromides in cases of insomnia than with any other remedy during my experience as a practitioner.—G. H. DONALD, M. D., Kansas City, Mo.

NEURALGIA AND HYSTERIA.—The varieties of neuralgia are almost as numerous as the nerves of the body. Wherever there is a nerve there may be a pain. In almost every form Neurosine will be found to give prompt relief and if persevered with in the interim of the attack the splendid effects of the bromide of zinc and cannabis indica as permanent nerve tonics and other bromides as alteratives may be confidently expected. The manifestations of hysteria are so infinite in number that Tanner has well said, "Hysteria simulates almost every known disease." It so often exists without any pathological lesion and persists after cure of the lesion that the practitioner has no resource but the well-known antispasmodics, anodynes and nerve tonics, which alone in many cases intervene to save the sufferer from the too common resort to opiates. Here Neurosine not only gives prompt relief, but offers the best means of cure.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery.

VOL. XXXVI.—No. 5. BALTIMORE, NOVEMBER 14, 1896. WHOLE No. 816

Original Articles.

HEMORRHAGE FROM THE BOWELS IN TYPHOID FEVER.

CLINICAL LECTURE DELIVERED AT THE JOHNS HOPKINS HOSPITAL.

By William Osler, M. D.,

Professor of the Principles and Practice of Medicine, Johns Hopkins University.

WE have had in the wards lately five cases of hemorrhage in typhoid fever, illustrating various grades of severity in this somewhat alarming symptom. In the first place, bleeding of moderate amount may occur and cause no special anxiety, except perhaps the unavoidable apprehension lest the bleeding should recur in a more grave form. There are three patients in the ward at present who have had slight hemorrhages, 200 or 300 c.c. of blood, without apparently influencing in any way the course of the disease and without causing any reduction in the temperature. They are all now convalescent.

In a second group may be placed those cases in which the hemorrhage is profuse and proves rapidly fatal. This is, of course, one of the most dreaded accidents of the disease, and justly so, since it may come on, as in the case which I shall narrate to you, when everything has gone smoothly and the patient appears to be improving in every way. In the first six years of the work of the hospital among 339 cases of typhoid fever there were 20 cases of hemorrhage, three of which died directly from the loss of blood and three from perforation after the bleeding had ceased. The following case illustrates well the uncertainties of the disease.

Admission on the tenth day; normal temperature for three days, relapse, sudden hemorrhage on the 31st day of illness; death.

Mr. X., aged 32, was admitted to the private ward with his wife, September 16, 1896, both in about the tenth day of mild typhoid fever. The preliminary symptoms and general condition I need not discuss.

The patient was a large, stout man. The attack was mild and though the temperature on admission was 104.5° , it subsequently did not rise to the bathing point and on the thirteenth day, four days after admission, it reached 97° . From September 20 to 23 the temperature was normal for part of each day. Then on the 24th, 25th and 26th the fever gradually rose, reaching on the latter day 105° , and he then entered upon a well marked relapse with, after the fastigium was reached, a steady temperature of about 103° .

He had retention of the urine at the outset and a good deal of irritability of the bladder. For a relapse the fever was singularly steady, gradually subsiding, and on October 6, the thirtieth day, it fell below 101° .

He had been rather dull and heavy and despondent, but on October 7, at the morning visit, he was for the first

time really bright and cheerful. His wife was convalescent and was with him and his condition was in every way favorable; the pulse was only 80 and considering that he had been ill for thirty days, he looked remarkably well, with a nice, bright color.

At 4 P. M. on the 7th he began to feel badly, a little restless and uneasy, and shortly after passed 700 c.c. of dark blood in clots. He became blanched and sweated profusely. The temperature fell from 101.5° to 96°. At 6 P. M. he had a second hemorrhage of 500 c.c. When I saw him in the evening he was extremely blanched, pulse scarcely perceptible. The temperature was below 96° and the ordinary thermometer did not register.

He was given the lead and opium pill by the mouth and small doses of morphia hypodermically. He had a very quiet night, slept eight or nine hours. He took his nourishment well and in the morning seemed somewhat better. The pulse, however, was so feeble that 1500 c.c. of salt solution were injected hypodermically and blood was transfused into a vein by the von Ziemssen method. He sank rapidly and died just twenty-four hours after the onset of the hemorrhage. The temperature did not rise above 96.5°. There was no autopsy.

The amount of blood passed per rectum by this patient was not great. It was very carefully measured and amounted in all to 1200 c.c., which is only a little over two pints. He was a large, full-blooded man and when one thinks of the venesections to which he would have been subjected sixty years ago, this amount seems small to have caused the fatal result; but it must be borne in mind that in all probability an equivalent, possibly a larger amount, was in the ileum and in the colon.

I have heard it stated—I cannot give the authority—that a fatal result may follow in typhoid fever without blood appearing externally, the patient bleeding into the bowel sufficient to cause death. In cases of this sort it is probable that a vessel of considerable size is eroded.

In a third set of cases moderate hem-

orrhages from the bowel recur at intervals throughout the disease, and while not dangerous as single bleedings, they debilitate the patient very much and may prove an important factor in causing a fatal asthenia.

In Ward F there is a patient, Geo. C., aged 28, who was admitted on October 11, on the eleventh day of his fever. He had been a very healthy man and there was nothing peculiar in the mode of onset of the attack. He came from eight or ten miles out of town and his condition on admission was very good, the temperature 102.5°, and pulse 100. He had no delirium; there were well marked rose spots and the spleen could be felt. The blood examination was negative.

At 7 A. M. on the 12th he passed a large, bloody stool. The temperature had been 101° before the hemorrhage and after it was 102.4°. At 8.30 A. M. he had a second hemorrhage, moderate in amount. This, too, did not cause any fall in temperature. He was ordered the lead and opium pill and had an ice-cap applied to the abdomen.

The temperature on the 13th, 14th and 15th ranged between 103° and 104°. He had a stool on the 15th without any blood.

On the 16th, at 1.40 P. M., when his temperature was 102°, he had a third hemorrhage—500 c.c. His temperature fell to 97°. The blood was very thick and tarry, mixed with clots. The patient became blanched; the pulse was 140, small and thready, and he was bathed in a profuse perspiration. He was ordered a sixth of a grain of morphia hypodermically. Between 5.30 and 6.30 P. M., the patient had two large bloody movements, each containing between 400 and 500 c.c. of blood mixed with feces.

The pulse became very running and feeble, about 150 per minute. He was ordered strychnia, one-fortieth of a grain subcutaneously every three hours, and as he became very blanched and feeble, at eight o'clock in the evening 1100 c.c. of warm salt solution were injected subcutaneously. The pulse improved markedly in volume, and fell

from 150 at 6 P. M., to 120 at 10 P. M. The patient's mental condition was good. He complained a great deal of thirst, and was given small quantities of cold fluids at short intervals.

On the 17th his condition was fairly good. He was no longer sweating; the abdomen was not distended; the temperature had not been above 101° . The blood count showed today 30 per cent. of hemoglobin, 2,600,000 red corpuscles per cubic millimeter, and 4000 white corpuscles. At 11.30 P. M., the patient had his sixth hemorrhage, about 250 c.c. in amount. There were no special collapse symptoms after it.

On the 18th, the patient was very comfortable all day. At 10 P. M., he had the seventh hemorrhage, about 250 c.c. of blood without clots. The tongue became tremulous and dry; the pulse was 118, and he had a good deal of subsultus, and the abdomen became distended. He was ordered turpentine, twenty minims every four hours. The lead and opium pill was continued. The mind was clear. For several days the urine had to be drawn off with a catheter.

From the 20th to 25th his condition was very critical. The pulse was very rapid, constantly above 130. There was a good deal of delirium in the evening. The tongue was tremulous and dry and the abdomen continued a little full and tense. On the 24th, he had been a little delirious in the morning, but answered questions intelligently. At rounds at 11 A. M., he was quiet.

At 1.10 P. M., he became violently maniacal, tried to get out of bed, kicked, scratched, and bit at everyone who came near him, shouting at the top of his voice, and swearing constantly. He was restrained with as little force as possible, and given a quarter of a grain of morphia hypodermically. For half an hour he remained very violent and noisy, throwing himself about and biting and kicking. For the next two hours he quieted at intervals, and through the night he remained pretty quiet. His temperature rose and at 10 P. M. was 105° , and he had ice sponges.

In the morning at the time of the visit he was rational; the pulse was 128, of moderate volume. A crop of subcu-

taneous ecchymoses appeared in the epigastric and right hypochondriac regions. At 2 P. M. on the 25th the patient had a very large movement, partly liquid, partly solid, and containing several large clots, and a considerable quantity of fluid blood. He became very blanched and white, and the pulse rose to 140, and was running in quality. While he was being changed he had another hemorrhage of about 250 c.c. Nearly a liter of salt solution was injected subcutaneously; ice was applied to the abdomen, and the lead and opium pill again given.

On the 26th, the patient was extremely feeble; the pulse rapid and difficult to count; 600 c.c. of salt solution were passed into the thighs. On the evening of the 26, he was very blanched, but sleeping quietly; temperature 103.5° ; pulse 136.

On the 27th he was rational; pulse was better, 128. There was some flatness over the right lower lobe and the breath sounds were feeble and distant.

October 28. This morning his condition seems more favorable in spite of the high temperature, 105° , and dry tongue. He is rational, and looks better than he has since the hemorrhage on the 25th.

No doubt it was an experience of cases of this kind, in which repeated bleedings, often profuse, were followed by recovery, that made several of the older physicians, notably Graves, not regard hemorrhage as so very serious. Though desperately ill, this man has a good fighting chance, as we say, and I hope next Wednesday to be able to report favorably upon him.

(November 8. This patient has today a temperature of 101° and is doing well.)

To one point I would call attention, namely, the good effects of the subcutaneous injections of salt solution. On several occasions this patient seemed to rally from a really desperate state after its use.

In a fourth group of cases—the true hemorrhage typhoid—bleeding from the bowels occurs as part of a general tendency, manifested by cutaneous as well as mucus hemorrhages. Of this we have had no illustration.

THE IMPORTANCE OF LABORATORY METHODS IN DIAGNOSIS.

By Charles E. Simon, M. D.,

Baltimore.

FOURTH PAPER.

The Examination of the Gastric Contents.—Many physicians have still to learn that the stomach tube is essentially an instrument used in diagnosis, and that its place in our therapeutic armamentarium is only a secondary one. Its employment is an absolute necessity in the diagnosis of diseases of the digestive organs, as it enables us to gain an insight into the chemistry of digestion and into the motor power of the stomach, which cannot be otherwise obtained.

Every physician who has a moral right to lay claim to that title will examine his patient's urine, if not as a matter of routine, then at least in cases in which the symptoms point to the kidneys as the seat of disease, or in cases in which the diagnosis is not at once clear. Why is it that the examination of the gastric contents is as yet so generally neglected, and why is it that the diagnosis of "dyspepsia" is still so much in vogue? Dyspepsia is merely a symptom, just as dyspnea, dysphagia, dysmenorrhea, dysuria. It means nothing more than difficult digestion. Surely such diagnoses should no longer exist.

The only explanation that the writer can offer is the assumption that the majority of physicians labor under the impression that the introduction of the stomach tube is a difficult process and that the examination of the gastric contents requires special skill and training. Neither is the case. The introduction of the stomach tube is decidedly less difficult than the introduction of a metallic catheter. With a little experience the instrument can be passed in about 5 or 6 seconds.

As to the examination of the gastric contents it may be stated that it requires less experience to test for hydrochloric acid and lactic acid than for albumen

and sugar. Both tests can be made at the bedside if necessary.

In the present paper it is the writer's aim to describe those tests in the examination of the gastric contents which can be carried out by the busiest practitioner and to point out the information which may thus be obtained.

As the various articles of food require a varying length of time for their digestion in the stomach, if they be digested there at all, and as the amount of free hydrochloric acid varies with the character of the food introduced and the time that it remains in the stomach, it is well, indeed almost necessary, to examine the gastric contents at a definite time after the exhibition of a definite meal. Various test-meals, as such meals are termed, have been suggested from time to time.

The best known among these is the test-breakfast of Ewald and Boas. The patient receives upon an empty stomach from 35 to 70 grammes ($1\frac{1}{4}$ to $2\frac{1}{2}$ ounces) of wheat bread and a tumbler of water or weak tea without sugar and milk. The gastric contents are withdrawn one hour later.

The writer prefers the double test-meal of Salzer, for the reason that with it a better idea may at the same time be formed of the motor power of the stomach. To this end the patient receives for breakfast about 30 grammes (1 ounce), of lean, cold roast, hashed or cut into strips, sufficiently small as not to obstruct the lumen of the stomach-tube, 250 c.c. (8 ounces) of milk, 60 grammes (2 ounces) of rice, and one soft boiled egg. Exactly four hours later the second meal is taken, consisting of 35 to 70 grammes ($1\frac{1}{4}$ to $2\frac{1}{2}$ ounces) of stale wheat bread and a tumbler of water or weak tea without sugar and milk. (Ewald's test-meal.)

One hour later the gastric contents

are withdrawn, when under normal conditions the organ should contain no remnants, or but mere traces of the first meal. If more than traces be found we are entitled to assume the existence of a motor insufficiency on the part of the stomach, and it may be stated as a general rule that the degree of motor insufficiency is directly proportionate to the amount of food remnant, referable to the first meal.

This is not the place to describe in detail the introduction of the stomach tube and the devices made use of for the purpose of obtaining the gastric contents. The writer merely wishes to emphasize two points in this connection. The patient should bend his head forward, and not backward, as is usually advised, when the tube is introduced to the posterior wall of the pharynx, and the flow of the gastric contents should not be "started" by the introduction of water through the tube. (For details consult Simon's Clinical Diagnosis, Lea Brothers. 1896.)

Having obtained the gastric contents, what can be learned from simple inspection? If more than traces of the first meal (if Salzer's test-meal has been employed) be found, we may assume the existence of a motor insufficiency, as has been pointed out already, and the general practitioner should remember that a motor insufficiency, *ceteris paribus*, is of greater importance clinically than a secretory insufficiency.

As long as the stomach is capable of transferring its contents into the small intestine within the normal period of time, the general nutrition but rarely suffers, even in cases where the secretion of hydrochloric acid is deficient or does not exist.

Motor insufficiency of the stomach may be referable to an inherent weakness of the muscular walls or to an obstruction to the outflow of the gastric contents. The former condition, which is commonly spoken of as atony of the stomach, is the most common and is usually secondary to some other malady, such as anemia, chlorosis, phthisis, diabetes, amyloid degeneration, etc. It is frequently encountered in cases of neu-

raesthesia and some of the psychoses. Acute infectious diseases, such as typhoid fever especially, are frequently followed by an atonic condition of the stomach.

The habitual ingestion of very large amounts of fluid, such as soups, milk and beer, not uncommonly leads to atony. Structural changes in the stomach walls, such as carcinoma of the small curvature or anterior surface, fatty and colloid degeneration, are other causes of atony, depending upon an inherent weakness of the muscular walls.

Atony referable to obstruction is usually seen in connection with ulcer, carcinoma and hypertrophic stenosis of the pylorus; more rarely it is referable to tumors or adhesions of neighboring organs. In cases of atony of this character dilatation almost invariably exists at the same time, and a careful examination of the gastric contents will show the presence of particles of food taken at previous meals and not infrequently a day or more ago. The amount of contents, moreover, will be unusually large.

The presence of pure gastric juice in the non-digesting organ when exceeding 100 c.c. (3 ounces) may be regarded as indicating the existence of hypersecretion, the so-called "Magensaftfluss" of the Germans.

Simple inspection, furthermore, will tell us whether the various articles of food which have been ingested have undergone digestion. The presence of undigested meat in notable amounts is indicative of an entire absence of digestive power on the part of the stomach, a condition which has been termed anadeny by Ewald (our atrophic cirrhosis).

Mucus, bile, blood, pus, stercoraceous material and certain parasites, such as ascaris and segments of tenia, can be recognized by simple inspection. The presence of mucus in large amounts is almost pathognomonic of the so-called mucous form of gastritis, while moderate amounts are usually referable to chronic pharyngitis.

When bile is obtained upon repeated examinations, a stenosis of the descending or horizontal portion of the duodenum may be suspected.

The presence of blood in the gastric contents is usually referable to ulcer or carcinoma, but is occasionally also found in connection with diseases leading to hyperemia of the mucous membrane of the stomach, such as Bright's disease, cirrhosis of the liver, heart disease. In melena, purpura hemorrhagica, pernicious anemia, etc., gastric hemorrhage may also be observed. It should be remembered that the color of the blood changes to a brownish-black when exposed to the action of the gastric juice for any length of time. The presence of blood of the color of arterial blood always signifies that the hemorrhage has been a recent one.

The presence of pus in notable amounts usually indicates that a neighboring abscess has burst into the stomach.

Stercoraceous material is only met with in cases of intestinal obstruction and especially ileus. From what has been said thus far, it is quite evident that much information of value may be gained from simple inspection.

The odor of the gastric contents is likewise important. The odor of rancid butter (butyric acid) and of vinegar (acetic acid) is usually referable to abnormal fermentative processes and is notably encountered in cases of dilatation associated with carcinoma. It should be remembered, however, that the odor of vinegar may also be observed in drunkards; the alcohol ingested has undergone acetic acid fermentation.

Having thus studied the macroscopic appearance and the odor of the gastric contents we may proceed to certain chemical tests. As a rule it is sufficient to test for the presence of hydrochloric acid. If this be found we may assume the presence of the ferments and their zymogens, as well as the absence of lactic acid.

In order to test for free hydrochloric acid a few drops of the gastric contents (filtration is not necessary) are treated with a drop of a 0.5 per cent. alcoholic solution of dimethyl-amido-azo-benzol. The development of a bright red color proves the presence of the acid in question. With a little experience it is pos-

sible to form an idea of the amount present from the intensity of the color. It is better, however, to resort to a quantitative estimation. This is perfectly simple and requires but a few minutes. 10 c.c. ($2\frac{1}{2}$ drachms) unfiltered gastric contents are treated with three drops of the above reagent. To this mixture a $\frac{1}{10}$ normal solution of sodium hydrate (*i. e.*, one containing 4 grammes (1 drachm) of NaOH dissolved in 1000 c.c. (1 quart) of water is added from a burette, drop by drop, until the red color has entirely disappeared and has been replaced by a greenish-yellow. For this purpose a Gay Lussac burette graduated to 25 c.c. in $\frac{1}{10}$ is most convenient; it may be carried in the pocket in a pasteboard case. The number of c.c. of the solution which were added until the red color disappeared multiplied by 0.00365 and the result by 10 will indicate the percentage amount of free hydrochloric acid in the gastric contents.

Under normal conditions the amount varies between 0.1 and 0.2 per cent. This condition of the gastric juice is spoken of as euchlorhydric. In disease we may meet with hyperchlorhydric (more than 0.2 per cent.), hypochlorhydric (less than 0.1 per cent.) and anachlorhydric (absence of free hydrochloric acid).

Formerly the absence of free hydrochloric acid was regarded as a pathognomonic symptom of carcinoma of the stomach. We know now, however, that anachlorhydric, while observed almost invariably in the disease in question, is very frequently also met with in benign affections of the stomach and especially in neurasthenic and hysterical individuals, constituting the so-called hysterical anacidity.

That anachlorhydric, moreover, exists in almost all cases of advanced chronic gastritis stands to reason. In our latitudes the absence of free hydrochloric acid may usually be regarded as indicative of a gastric neurosis, whenever carcinoma can be excluded. True chronic gastritis is far less common in the United States than in Europe.

Hyperchlorhydric, *i. e.*, the presence

of excessive amounts of free hydrochloric acid, is likewise of common occurrence in neurasthenic individuals. In France it is as common as a neurosis, as anachlorhydria is with us. In gastric ulcer and in cases of carcinoma starting from an old ulcer, excessive amounts of hydrochloric acid are the rule.

Not infrequently a continuous secretion of gastric juice is observed in cases of hyperchlorhydria. This condition constitutes a neurosis of the stomach which bears the name of Reichmann.

The occurrence of hypochlorhydria always presupposes the existence of disease of the secretory elements of the stomach and is thus observed in subacute and chronic gastritis, in incipient carcinoma, in certain cases of dilatation, atony, and at times in ulcer.

A normal secretion of hydrochloric acid — euechlorhydria — definitely excludes the existence of a diseased condition of the secretory elements. Euechlorhydria can never coexist with gastritis, ulcer or carcinoma. It is frequently observed in cases of nervous dyspepsia and atony of mild degree.

As has been stated above, it is not necessary to apply any further chemical tests to the gastric juice, if free hydrochloric acid be found. If this, however, be absent, an examination should be made into the presence of lactic acid.

To this end 5 to 10 c.c. ($1\frac{1}{4}$ to $2\frac{1}{2}$ drachms) of gastric juice are diluted from 10 to 20 times with water and

treated with one or two drops of a 5 per cent. aqueous solution of the sesquichloride of iron when, in the presence of lactic acid, a distinct green color is obtained if the vessel is held to the light.

Under normal conditions lactic acid never occurs in the gastric contents in amounts which can be recognized with the above test. A positive reaction always denotes the existence of disease and in the great majority of cases of cancer of the stomach. The diagnosis is rendered extremely probable if a positive reaction be obtained, when the following procedure, suggested by Boas, is employed. The patient's stomach is washed out completely at night.

From this time off until the following morning nothing but water may be taken. A breakfast is then administered which consists of a plateful of oatmeal soup, prepared by boiling down to one pint a quart of water to which one tablespoonful of rolled oats has been added. A pinch of salt may be used, if desired.

An examination of the ferments and enzymes of the stomach may be dispensed with, as a rule, if the gastric contents be examined, as described. The writer trusts that he has shown in this paper that the examination of the gastric contents is by no means a difficult matter and that much information of value can thus and only thus be obtained.

GAUZE IN THE UTERINE CANAL.

THE employment of gauze in the uterine canal has attracted the attention of Dr. John H. Rishmiller for several years and he has cited a number of cases from his own practice.

He believes from his experience in the use of gauze in the vagina and uterine canal, laying down the conclusions in the *New York Journal of Gynecology and Obstetrics*, that—

1. The uterus should not be tamponed in aseptic cases unaccompanied by functional disturbances.

2. Firm uterine gauze tamponade does

not promote drainage, but, on the contrary, favors retention.

3. In trachelorrhaphy and amputation of the cervix, uterine gauze insertion is a hindrance to coaptation, and on extraction a disturbance to primary union.

4. In septic cases, both puerperal and non-puerperal, very loose gauze insertion into the uterus, which is to be removed within six to eight hours, is highly commendable.

5. In functional disturbances of the uterus depending upon flexion, mural neoplasms, and impeded circulation, thorough tamponade is invaluable.

CYSTOSCOPY AND URETEROSCOPY.

WITH EXHIBIT OF INSTRUMENTS AND REPORTS OF CASES.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY.

By J. W. Long, M. D.,

Professor of Diseases of Women, Medical College of Virginia.

ONLY recently has the bladder received the attention it deserves from gynecologists. Up to the last few years it was difficult to exploit that viscus to determine the condition of its inner surface and more difficult to explore the ureters.

Prior to the invention of the instruments I am about to exhibit, we were obliged to depend upon the dilatation of the urethra by a very crude method; indeed, stretching by the fingers, which often brought on permanent incontinence, is within the recollection of most of us. To explore the bladder was almost impossible because of collapse of its walls and, as was said before, exploration and treatment of the ureters was attended with even more difficulty.

For many years, distension of the bladder with water and fishing around for the mouths of the ureters were our only resources. Not until Kelly accidentally struck upon the method to be described, could we satisfactorily treat cystic and urethral troubles. The method depends on, first, distension of the bladder with air, which a few years ago was thought to be exceedingly dangerous; and second, instruments whereby we may have a direct view of the inside of the bladder and the mouths of the ureters.

The instruments I show you are first, sixteen dilators, graded according to their measurements by the metric system. The numbers 10 to 14 are those usually employed. It is surprising to note the size and amount of stretching the female urethra can stand. The second instrument is the calibrator, so-called, because, originally, it was intended to measure the size of the urethra. It is cone-shaped and graduated and is now used in place of the original dilators.

At an early stage in the work it was found that the external meatus was the point of greatest resistance in dilating the urethra. The third instrument is the cystoscope (made in various sizes), consisting of a straight tube, flanged at one extremity and having projecting at an angle from that, the same extremity, a handle. Fitting in this is an obturator. After the urethra is dilated the cystoscope is fixed in by a gentle, rotatory movement and when the obturator is withdrawn, air rushes in, distending the bladder. I have suggested to Dr. Kelly that the cystoscope might to advantage be made shorter and with a more flaring flange.

The position the patient was made to assume, at first, was the dorsal with hips much elevated. I have devised a pelvis elevator for this purpose. The bladder is first catheterized, the urethra dilated, with cystoscope introduced, and the residual urine drawn off by a suction apparatus, but it is almost a matter of impossibility to keep the bladder entirely clear of urine. A better posture is the knee-chest, because in it the residual urine gravitates from the floor of the bladder to the most dependent part, and the suction apparatus may be dispensed with. After exploring the entire inner surface of the bladder, which can be seen perfectly, it is easy to find the mouths of the ureters. Any kind of clear, reflected light can be used with a head mirror.

Through the cystoscope can be introduced the ureteral searcher, which is a small sound with the handle bent at an obtuse angle. At first, this is a difficult procedure, but practice makes it easy. I tried for eighteen months to catheterize the ureters and had about decided that it was one of the things I could not do, when I suddenly hit upon it, and

can now introduce the ureteral catheter in a few seconds.

The original ureteral catheter was devised by Simon. Pawlik modified it, and Kelly perfected the Pawlik instrument. With a delicate pair of mouse-tooth forceps, it is not at all difficult to pick a piece of cotton, stone, etc., from the bladder; or, with an applicator, to make an application to its walls.

Whale-bone bougies are employed, first, to determine whether or not the ureters are patulous; second, to protect them during hysterectomy.

The vesical balloon, devised by Dr. Clark, consists of a fine rubber bag with a stem of rubber tubing. It is used for the treatment of chronic vesical catarrh where there are marked changes in the bladder walls, and which are not amenable to treatment by ordinary applications. He employs it covered with a 10 per cent. gelatole of ichthyol, melting at the temperature of the body. The balloon is buttered with the gelatole, rolled up, grasped in a pair of special forceps introduced through the cystoscope, and distended with air, medicine therapy reaching every part of the inner surface of the bladder. To prevent injury or rupture of the bladder it is important to learn first how far the balloon should be distended.

By means of the cystoscope, it has been discovered that many of the so-called cases of cystitis, especially in young women, are not general inflammations of the vesical mucosa, but hyperemia, or at most, limited inflammations; and many of them are easily and rapidly

cured by mild solutions of nitrate of silver or any other astringent, applied through the cystoscope. I shall cite only one or two cases to demonstrate its efficiency.

CASE I. Was that of a young woman, married, who, for years, had had cystic trouble. Under cocaine, anesthesia, the cystoscope being introduced and the area of inflammation determined, three or four applications of nitrate of silver sufficed to cure.

CASE II, a young woman whose tubes and ovaries had been removed two years before I saw her, for, probably, ovaro-salpingitis. After the operation, ventral hernia occurred, and she came for treatment. Inquiry revealed more suffering from the bladder than from the hernia, and brought to light the fact that for thirteen years she had been the victim of cystic trouble. There was very little pus in the urine, but a slow, irritating, aggravating cystitis was present. Applications of nitrate of silver rendered it worse. Then, Dr. Clark's method was employed. This, at first, was painful. Four applications, at intervals of three days, were made, and now there is complete cure. I afterwards relieved the hernia, which was as large as a peck measure, by operation.

I wish it clearly understood that I claim nothing original in this work. Dr. Kelly should be credited with a large part of the recent advances. Knowing that I was working alone to save lives, he has urged me to report my results, which heretofore I have not done, and which I hope to do more extensively.

THE DOSAGE OF NITROGLYCERINE.

THE dosage of any drug can only be found out by repeated trials and often the dangerous dose is only indicated by a serious effect. Dr. W. L. Armstrong, in the *Medical News*, has had varying effects from the dose of nitroglycerine, in regard to which he draws the following conclusions:

1. It is only when dealing with arteries in which there is no more than the normal tonic of the walls that the drug is liable to produce disagreeable effects. Under this condition it should

be administered with caution and in small doses.

2. In cases of arterial tension, the drug can be used more freely than has been customary among practitioners, the dose being proportioned to the degree of tension.

3. In cases of arterial tension, tolerance to the drug is rapidly acquired and, by a slight increase day by day, very large doses can soon be taken with safety, the constant guide being the degree of tension in the arterial wall, as noted by the finger or sphygmograph.

Society Reports.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

THE President, Dr. Landon B. Edwards, in the chair. Dr. Mark W. Peyser, Secretary and Reporter.

Dr. J. W. Long read a paper on CYSTOSCOPY AND URETEROSCOPY, WITH EXHIBIT OF INSTRUMENTS AND REPORT OF CASES. (See page 80.)

Dr. Jacob Michaux asked *Dr. Long* if he had found hyperesthesia of the external parts in the case last described.

Dr. Long: Yes, and it has been dismissed four or five months.

Dr. Michaux, continuing, said that in these cases he had not had uniformly good results. Those in which he had succeeded best were those in which he had cauterized liberally, according to the old methods. In conditions of hyperesthesia of the nymphae and meatus he had been much discouraged. He thought, therefore, that *Dr. Long's* remarks were interesting and valuable and that the new method described had opened up a new field.

He described the following case as illustrative of failure: In a woman, aged 36 years, primipara, there was intense hyperesthesia of the mouth of the urethra; the desire to urinate was constant. The urethra being dilated, it was found to be inflamed and was cauterized and washed out; the condition was thought to have been cured. The patient, who lived away from town, went home and soon reported herself in the same condition. She returned and some little growths, caruncles, were removed from the meatus, producing no apparent benefit. Thinking, then, the trouble was due to the state of the nerves, a section of the meatus was cut out; but neither did this result in relief, nor did a second, deeper operation.

During all this period, extending over several years, suffering was intense, all treatment failing. *Dr. Michaux* thought it a case of cystitis, with a peculiar condition of the nerve fibers. It was one of the cases troubling him and he would

like to hear some discussion of it with a view of eliciting instruction.

Dr. Hugh M. Taylor said that one feature should be added to *Dr. Long's* paper and that was that the first suggestion as to the safety of the ureters during laparotomy was made by a Virginian, *Dr. Alexander Irvin* of Evington, Va. He suggested catheterization of the ureters.

Dr. Taylor said he had not yet had an opportunity to test the efficacy of the instruments described, but had no doubt that, by their means, treatment and cure would be greatly facilitated.

Dr. J. N. Upshur remarked that, in the local treatment of any disease, we should always have one caution. The subject presented by *Dr. Long* was very interesting, but many diseases of organs treated locally are not primarily due to the organ itself. This is especially true of the bladder. Cystitis is often reflex, as from abrasion of the os uteri. In one case, he saw no indication pointing to disease of the bladder itself. When the treatment was withdrawn from the organ it was cured. Retro-displacements, antelexions, anteversions, hemorrhoids, anal fissures, nervous conditions, all give rise to irritation of the bladder, treatment, then, directed to that organ failing to relieve.

A case in point was as follows: A woman, with an intensely irritable bladder and frequent desire to void urine without satisfaction. As a matter of curiosity *Dr. Upshur* asked the patient to keep an account of the number of times she was up during one night and was told that, between bed-time and 7.30 A. M., it was seventy times.

The woman was supposed to have been addicted to masturbation and was accused of it by former physicians, but vehemently denied it and he was inclined to believe her. There was intense hyperesthesia of the external genitals and a specular examination revealed a stenosed cervix, with marked antelexion. Being before the days of curettage, he dilated without this procedure; but there was no benefit except a relief of dysmenorrhea. He could find no other trouble except a tender spot in the lum-

bar spine and advised her to seek another physician, which she did, but again received no benefit. Despairing, she gave up all treatment, and in the course of time her trouble disappeared. He did not believe any bladder conditions existed, because none of them would have got well spontaneously. He thought it a case of hysteria based upon some nervous condition. He used this case as illustrative of the remark he made in the outset, that with the development of measures for local treatment, we must not forget causes in other directions. Various deranged conditions of the stomach may cause vesical conditions and a fairly common cause is, women do not drink enough water.

Dr. W. T. Oppenheimer described a case of LAPAROTOMY with a white discharge from the abdomen upon which he asked for information. A railroad man was suddenly attacked by violent pain in the region of the liver, which he thought was due to gall-stone. The patient passed a bad night, and by morning the pain had radiated over the entire abdomen and was accompanied by nausea and vomiting; in consequence, the diagnosis was changed to appendicitis. *Dr. I. H. White* was called in consultation. The pain, in the meantime, being again confined to the liver, gall-stone was the diagnosis agreed upon. The patient grew much worse; temperature fell, pulse became rapid and feeble, and tympanites developed. In a second consultation, *Dr. White* advised no operation. *Dr. George Ben Johnston*, on seeing the case, said it was possibly appendicitis, but he, too, considering the man's condition, thought operation unjustifiable.

Dr. Oppenheimer told the patient his chances were almost hopeless; that an operation at least could do no more harm than hasten the end, and obtained his consent. At 12 P. M., he was removed to the Retreat for the Sick and the abdominal cavity opened. A fluid, chyliferous in appearance, flowed out. Everything, so far as ascertainable, appearing normal, the gut not sloughing, etc., the incision was closed and a gauze drain inserted. The following morning

the swelling had abated, the temperature had fallen, and the discharge, which was profuse, became yellow. After four weeks the latter had become inspissated and could be squeezed out; at times being so firm that it had to be lifted out with forceps. The man recovered and is now at work.

In answer to various questions, *Dr. Oppenheimer* stated that *Dr. Hoge*, on examining the discharge, found it gave the reaction of bile. The gall-bladder could not be reached. There was no jaundice. The man had had slight attacks of pain before, but they passed off in an hour or two.

MARK W. PEYSER, M. D.,
Secretary.

BALTIMORE MEDICAL ASSOCIATION.

MEETING HELD MAY 25, 1896.

THE President, *Dr. Randolph Winslow*, in the chair.

Dr. H. H. Biedler reported a case of COMPOUND COMMINUTED FRACTURE OF THE SKULL, and exhibited the patient. On March 22, he was struck with a brick on the forehead. He was trephined March 23. The temperature remained about 99° for three or four weeks, when he had suppurative tonsillitis and then it rose to 101°. There was no other trouble. The bone was greatly comminuted but no brain substance was lost.

Dr. G. Lane Taneyhill: *Dr. Biedler* said that the anterior portion of the brain can stand greater injury with more impunity than any other part. The history of the late civil war does not sustain this assertion.

Dr. E. G. Waters: Referring to cases seen by him during his earlier professional life the mortality in injuries to the skull was very great. Patients generally died from meningitis. He called attention to the length of the period that elapsed between the time *Dr. Biedler's* patient was struck and the time of the operation, nearly 24 hours. He also mentioned a case of neuralgia in a lady who received an injury just above the supraorbital ridge.

Dr. R. Winslow spoke of the location

of the injury in Dr. Biedler's case. It apparently does not involve the frontal sinuses. This has a prognostic value since the wound does not communicate with the nose, and therefore is less liable to septic infection. The location also affords good opportunity for drainage. The site of the injury also is such that it does not affect the centers of sight. The anterior situation of the wound also is such that it does not interfere with motion. He agrees with Dr. Biedler about the import of injuries to the anterior portion of the brain. Intellect might possibly be interfered with, but not motion, sight, hearing, etc. The point must always be considered as to what will happen in cases of depressed fracture if left alone. These cases must be treated antiseptically. Injuries of this kind are liable to be followed by tetanus, which, it is now known, is due to germs. The germs of tetanus are found especially in the earth. Where tetanus is feared, the best treatment is to leave the wound open. He referred to the celebrated crowbar case.

Dr. Waters: The crowbar case referred to by Dr. Winslow occurred during Dr. Waters' student days. There was a weakening of the patient's intellect after the accident. Does the germ theory of tetanus throw any light upon the epidemic of tetanus caused by toy pistols that occurred in this city several years ago?

Dr. Winslow: There must be some relation between atmospheric conditions producing tetanus. Most of the toy-pistol accidents occurred in boys, the injury being upon the hands. Boys are not particularly cleanly, their hands being often soiled. Experiments made with bullets infected with the anthrax bacillus and then shot through the ears of a rabbit invariably produced anthrax.

Dr. Biedler thinks that Dr. Taneyhill is probably in error as to the history of the late war. His experience teaches that injuries to the anterior portion of the brain are not so severe as to other parts. The frontal sinus in this case was open, and the wound was treated aseptically. The germ of tetanus is found in greater numbers in some soils than in others.

Dr. J. L. Ingle moved that when we adjourn tonight, we do so until October. Carried.

Dr. Taneyhill brought up the subject of writing to the United States Senators in regard to the question of vivisection.

Dr. Ingle moved that a committee be appointed by the chair to draft resolutions which are to be signed by the President and Secretary and forwarded to Senator Gibson.

Dr. Waters thought it was a matter with which we have nothing to do.

Dr. Biedler agreed with Dr. Waters and thought, moreover, that it would do no good.

The motion, however, was carried and the committee was appointed, consisting of Drs. Taneyhill, Ingle and Kemp.

The Association then adjourned.

(The above minutes were approved and adopted at the regular meeting of the Baltimore Medical Association, held October 12, 1896.)

EUGENE LEE CRUTCHFIELD, M. D.,
Recording and Reporting Secretary.

Correspondence.

RUSH MONUMENT COMMITTEE.

SYKESVILLE, MD., October 31, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Will you kindly announce that the following subscriptions to the Rush Monument Fund have been received since April 17, 1896. April 17, Dr. J. W. Hoff, Pomeroy, O., \$5.00; April 17, Dr. J. T. Acker, Croton-on-Hudson, N. Y., \$5.00; April 30, Peoria City Medical Society (through Dr. O. B. Will, Peoria, Ill., \$25.00; April 30, Dr. D. W. Cathell, Baltimore, Md., \$1.00; April 30, Dr. W. T. Cathell, Baltimore, Md., \$1.00; May 9, Dr. J. P. Getter and others, Mifflin County, Pa., \$3.00; May 21, Dr. E. H. Bishop, Towson, Md., \$1.00; June 10, Dr. C. B. Burr, Flint, Mich., \$10.00; June 29, Dr. W. H. Hardin, Anderson C. H., S. C., \$1.00; June 29, Herkimer County Medical Society (through Dr. G. Graves), Herkimer, N. Y., \$25.00; September 30, Dr. J. W. Grosvenor, Buf-

falo, N. Y., \$1.00. September 30, interest to date, \$81.00; total \$159.00; before reported, \$3727.39; grand total, \$3886.39.

Yours very truly,

GEORGE H. ROHÉ, M. D.,
Secretary.

Medical Progress.

BULLETS IN THE BRAIN AND THE RÖNTGEN RAYS.—A. Eulenburg (*British Medical Journal*) relates two cases in which it was possible to localize bullets in the intracranial cavity by means of radiography.

CASE I. A man, aged 18, accidentally shot himself in the head with a revolver. The bullet entered $3\frac{1}{2}$ cm. above and 2 cm. in front of the attachment of the ear. There was complete unconsciousness until the following morning. On the third day a left-sided homonymous hemianopsia developed, and then a left hemiplegia. The bladder was temporarily paralyzed. The hemianopsia disappeared on the tenth day and the hemiplegia gradually got better, with the exception of the lower part of the leg. The patient was lame, but could walk.

At the end of the seventh week Eulenburg found the lower face muscles weaker on the left side than on the right, and also the left arm weaker than the right. The gait was faltering and the left leg stiff. Movements of the foot and lower leg were only just possible. Sensation was considerably affected. There was pain in the back of the head. Progressive improvement ensued. Eulenburg thought that the bullet had penetrated to the right of the sella turcica, injuring the right optic tract and the right crus. By radiography Buka showed that the ball was in the middle fossa of the skull to the right of the middle line.

CASE II. A man, aged 33, attempted suicide ten years ago. *The revolver wound was in the hinder part of the right temporal region. At first there were signs of intracranial pressure. For the first four years only slight symptoms were noted. Attacks of pain in the head supervened, and the patient

thought that the bullet must be present. He was then in an asylum for five years, and discharged as incurable. After his discharge he seems to have been able to work. When seen by Eulenburg the man was pale and wasted. Hardly a trace of bodily or mental symptoms could be made out. There was occasional headache in the right supraorbital and temporal regions. There was thus no clinical evidence that the bullet was still present. It was, however, shown by Buka, by means of the Röntgen rays, that the bullet was situated in the middle fossa of the skull behind the right orbital fissure. Brissaud and Londe report a case in which a man had been struck by a revolver bullet (caliber 7 mm.) in the middle of the left frontal eminence on August 4, 1895. Various symptoms followed, and finally a spasmodic left hemiplegia of both limbs and the face remained. The upper fibers of the facial, the motor oculi and the masseteric nerves were not involved. Röntgen rays showed the skull, the frontal eminence and sinus, the maxillary sinus, petrous and malar bones, zygoma, orbital cavity, etc. The bullet was seen situated in the posterior region at the level of the second temporal convolution, probably above the tentorium. This position corresponded exactly with the direction of the track deduced by the resulting paralyses. The chief interest, besides the exact localization of the missile, consists in the fact that the bullet, being in the temporal region, could not be the cause of the hemiplegia. The latter was due to the section of fibers met with by the bullet—that is, it had a capsular, not cortical, origin, and therefore could not have been benefited by any operation. An exposure of an hour and three-quarters was given and the image would have been still clearer but for a slight clonic movement of the head.

* * *

VASELINE IN MIDDLE EAR AFFECTIONS.—Delstanché (*Laryngoscope*) reports obtaining good results from the intra-tympanic injections of pure liquid vaseline in both acute and chronic middle ear affections.

MARYLAND

Medical Journal.

PUBLISHED WEEKLY.

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TO CORRESPONDENTS.—Original articles are solicited from members of the profession throughout the world. Reprints will be furnished in payment of accepted articles if the author's wish is so stated at the time.

CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL.

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, NOVEMBER 14, 1896.

A REVIEW of the most recent publications concerning the efforts put forth to make cow's milk wholesome for babies

Milk for Babies. cows would take many pages.

The relative merits of new milk, Pasteurized milk and sterilized milk are maintained by their respective advocates with great energy. It is easy enough to kill the germs in milk, heat will do that—moderate heat at 65° C. (150° F.) for thirty minutes, as in Pasteurization; or heating in a vessel of boiling water, at a temperature of about 100° C. (202° F.) for half an hour, as in sterilization; and it is easy enough to keep out germs thereafter by heating with a cotton stopper in the bottle or by keeping very cool until used (freezing the new germs out, so to speak).

But the trouble is that the baby is not a calf—races of bos and homo being distinct. There's the rub! If we could modify the baby toward a calf and the cow's milk toward the human liquid we might strike a half-way point at which the modified milk would just exactly suit the modified baby. With unmod-

ified babies the cow's milk, however adjusted, diluted, predigested, heated, cooled, re-proportioned, filtered, gives dyspepsia, gives sometimes diarrhea when the baby is worn out with the poisoned, roasted city air of summer.

The aseptic cow done up in white muslin, sterile bloomers, with a sterile covering to its agile tail, has probably not yet appeared on the scene, and the cleanliness of the milkmaid man as he extracts the nourishing liquid before daybreak is somewhat questionable. Even aseptic human nature is frail; especially at 4 A. M., with ten or twenty cows to milk before train time. The cleaner the better, surely; but expect not too much.

But not to become too much involved, let us tuck away in our minds an item or two from a discussion of the subject in the *British Medical Journal* of September 12, 1896. There Dr. Campbell recommends that the milk be placed in a two-pint bottle stopped with cotton wool and set into a covered metal vessel upon a wire stand, which keeps it off the bottom. In this metal vessel water, not reaching up to the bottle, is heated to 160° F. as tested by a thermometer fitted through the lid. 160° F. being reached, the vessel is removed from the fire and put into a cosy for thirty minutes; then it is removed to a very cool chamber until used. This is said to kill most of the germs, not to make the milk unwholesome and not to give it the "boiled" taste.

This milk (here following Dr. Ashby), or the same may be done with fresh milk, un-Pasteurized, is allowed to stand cool for two hours, by which time most of the cream will have risen. One pint of the milk (that next the bottom of the jar and below the cream) is then drawn off by a siphon (a simple, bent glass tube will do) and a pint of boiled water or thin barley water, with an ounce of sugar (or milk sugar) is poured into its place. The stopper is replaced and the bottle kept very cool until all is drunk. Before each feeding the cream is well mixed with the milk beneath it.

By this siphon method—so simple—all of the fat is kept in the diluted milk. It will readily be adopted by the mother, as a glass tube will bend to a siphon over any gas jet and the baby will show the benefit of the double proportion of easily digestible cream secured at each feeding.

NEW books are turned out so rapidly that none but the omniverous reader has an opportunity to appreciate *The Older Writers*. some of the more ancient works of medicine. The library of the State Medical Society contains a rare lot of old books, some of which are mere curiosities while others are of real value. An old work on diseases of the liver, for instance, shows the author, one Faithhorn, to be a man of keen powers of observation and of wide experience. The clinical history and pathology of the various hepatic disorders he describes with most faithful accuracy.

While a perusal of this book may be of little interest from a practical standpoint, still it is instructive as showing how carefully men even as late as the early part of this century observed and described disease. In some cases this minute description grows tiresome, but to those who have labored over obscure cases of abdominal disorders, whether of the stomach, intestines, or liver, such a clearly written work even at the present day would be of great help.

It is only when the matter of treatment is touched that the modern physician smiles, and yet there are many prescriptions in this book which might be well used now. The scene of the author's experience was in India and there liver troubles are especially frequent. He recommends bleeding, which in the plethoric is especially efficacious, but he orders it in all cases and to be continued *ad deliquium*, that is, until the patient falls down from weakness. Then he is set up again and bled again. The author gives rather a mixture in one prescription but in some cases he orders fractional doses of calomel as in the present time.

It is chiefly for the descriptions that many of the older works are valuable and they serve to remind us that while we may want the latest books we should not forget these old descriptions which are never antiquated.

THE recent ether jubilee in Boston brought out again the question of the importance of specific instruction in the administration of anesthetics. The responsibility of giving ether or chloroform during an operation is very great and yet there are very few institutions where

instruction on this point is given except in a casual way as if of minor importance compared with the operation on the case. The most recent notice on this point appears in the *Philadelphia Polyclinic* to the effect that the faculty of that school, appreciating that anesthetics should be given by skilled hands, have appointed an instructor in that branch who shall also be anesthetizer to the hospital.

This is certainly a step in the right direction. There are dangers which both ether and chloroform may present when administered to the point of unconsciousness and every physician should understand the manner of giving these agents, should be acquainted with their mode of action and be ready when an emergency arises and when quick efforts at resuscitation are necessary.

Too often the anesthetic is given by a student or young interne who is too much interested in the operation to keep note of the patient's breathing and heart. Every school should give some instruction, didactic as well as practical, and there are few hospitals where there is not sufficient surgery to make a large number of graduates skillful in the use of anesthetics.

THE specialists who are looking for another branch of work may find their opportunity in taking up the diseases

Diseases of the Aged. of the aged. Dr. A. K.

Bond, in a communication to the *Medical Record*, asks why the diseases of children are so carefully studied as a separate part of the practice of medicine while diseases of the aged receive so little attention. Would it not be well to combine the diseases of the two extremes of life under one specialty?

The life of the aged is the reverse of that of the infant; the thread of life is gradually unwinding itself and it is very possible that there are conditions and states in the life of those near the end of life much akin to the same conditions and states in the growing infant and young child.

In many cases it is well to lessen the dose of the drug in extreme age, keep the bowels open and allow more rest than in vigorous middle life. Whether anyone will ever proclaim himself a specialist in the diseases of the aged, it is certain that he who succeeds in that department of medicine will make his fame in any other.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending November 7, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		19
Phthisis Pulmonalis.....		27
Measles.....	3	
Whooping Cough.....	3	
Pseudo-membranous Croup and Diphtheria. }	25	15
Mumps.....	1	
Scarlet fever.....	16	
Varioloid.....		
Varicella.....	3	
Typhoid fever.....	25	11

An Association of urologists has been formed in France.

Dr. Louis McLane Tiffany has been elected a trustee of the Peabody Institute.

Dr. Tanner, of starvation fame, was recently burned to death in a conflagration.

The New York County Medical Society has elected Dr. Landon Carter Gray president.

The Philadelphia Polyclinic has established an instructor in the administration of anesthetics and a lectureship on defects of speech.

Dr. James B. Murdoch, a well-known physician of Pittsburg and dean of the Western Pennsylvania Medical College of that city, is dead.

Health Commissioner McShane of Baltimore will represent that city at the Pan-American Medical Congress at Mexico next week.

From 300 to 400 physicians from the United States will attend the Pan-American Medical Congress at Mexico. Dr. H. L. E. Johnson has made all the transportation arrangements. The fare from Baltimore and return will be about \$150. The Baltimore and Ohio Railroad will carry many delegates.

American medical writers are not so often honored by being quoted or translated abroad as to become a matter of remark. It has been, however, the lot of one of our contributors to have that distinction. Dr. Irving C. Rosse, who has written more and

been more extensively read than any other physician in Washington, receives frequent mention of his work from both French and Italian sources. Not long since, among other things, his paper on "The Neuroses from a Demographic Point of View" was faithfully translated by Dr. Audry and appeared in Paris in *Archives de l'Anthropologie Criminelle*.

The American Association of Obstetricians and Gynecologists, at its ninth annual meeting, held at Richmond, Va., elected the following named officers for the ensuing year: President, James F. W. Ross, M. D., Toronto; Vice-Presidents, George Ben Johnston, M. D., Richmond, and John C. Sexton, M. D., Rushville, Ind.; Secretary, William Warren Potter, M. D., Buffalo; Treasurer, Xavier O. Werder, M. D., Pittsburg. Executive Council: Charles A. L. Reed, M. D., Cincinnati; Lewis S. McMurtry, M. D., Louisville; A. Vander Veer, M. D., Albany; J. Henry Carstens, M. D., Detroit; and William E. B. Davis, M. D., Birmingham. The next annual meeting was appointed to be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday and Friday, August 17, 18, 19 and 20, 1897.

During October, according to the report of the Health Department, there were 879 deaths in Baltimore, an increase of 89, compared with October, 1895. Of these, 696 were whites and 183 colored; 72 died of infectious diseases, 87 of consumption, 54 of pneumonia, 15 of bronchitis, 23 of Bright's disease and 28 of typhoid fever; 318, or 35.37 per cent. of the total deaths, were of children under 5 years of age. During the month 237 cases of infectious diseases were reported, an increase of 63 compared with the preceding month. The Department made 510 inspections of nuisances and issued 3351 notices to abate such. It inspected 21,836 gallons of milk and condemned and spilled 469. The meat inspector made 634 visits, the dairy stable inspector 71 and the bakery inspector 129. The first named condemned 5143 pounds of meat, 600 of fish, 224 of poultry, 91 dozens of crabs, 19 bushels of vegetables and 25 of fruit. Daily bacteriological examinations of city water were made, but nothing of an injurious nature was found. The bacteriologist also made many tests for tubercular and diphtheria bacilli. The chemist analyzed 14 samples of milk and as many of water.

Book Reviews.

ANATOMY, DESCRIPTIVE AND SURGICAL. By Henry Gray, F. R. S., Lecturer on Anatomy at St. George's Hospital, London. New and thoroughly revised American edition, much enlarged in text and in engravings, both colored and black. In one imperial octavo volume of 1239 pages, with 772 large and elaborate engravings on wood. Price of edition with illustrations in colors: Cloth, \$7.00; leather, \$8.00. Price of edition with illustrations in black: Cloth, \$6.00; leather, \$7.00. Lea Brothers & Co., Publishers, Philadelphia and New York. 1896.

When a book passes through thirteen large editions it is proof positive that it fills an important place in literature and this is especially true of a work on anatomy. The first edition was published in 1858 and at once assumed a high position as a text-book and with each succeeding revision the value of the work has been enhanced. The present edition has been thoroughly revised by American authors and whilst the general arrangement has been allowed to remain as heretofore, many new illustrations and alterations of the text have been made. The chapters on the brain, teeth and abdominal viscera have been rewritten and the most recent anatomical investigations in these departments have been utilized. The work, in our opinion, is the most valuable one in the English language to put into the hands of the undergraduate medical student.

The *Western Medical Review* is a new medical journal published at Lincoln, Nebraska. It is a monthly journal and Dr. George H. Simmons is the editor.

REPRINTS, ETC., RECEIVED.

Synopsis of One Hundred Ovariectomies. By Edward Borck, A. M., M. D. Reprint from the *Medical Mirror*.

Pyrozone and Diluted Hydrochloric Acid in Suppurating Inflammations of the Middle Ear. By William Cheatham, A. B., M. D.

Eye Symptoms in Nephritis, as seen with the Ophthalmoscope. By William Cheatham, M. D. Reprint from the *American Practitioner and News*.

Sleeve Bandage for Fracture of the Clavicle; Fractures and Dislocations, Radius and Ulna. By Edward Borck, A. M., M. D. Reprint from the *Medical Mirror*.

Current Editorial Comment.

POSITION AFTER LABOR.

Medical Summary.

CONFINING a woman who has just passed through pain and exhaustion of labor to the dorsal posture is the refinement of torture.

TABLET MEDICATION.

Journal of the American Medical Association.

THE "tablet fad," as some of our pharmaceutical friends choose to call it, appears to have come to stay. The convenience, cleanliness and presumably accurate dosage of the preparations recommend them readily to the practitioner, and at the present time there is hardly a doctor's office where the familiar glass stoppered bottles and labels of the different manufacturers are not to be encountered. They have undoubtedly affected the druggists' business to some extent, and have perhaps also modified medical practice; how materially is a question to be settled in the future. That they are the unmitigated evil that some pharmaceutical writers hold is doubtful; but that their extensive adoption as a mode of drug-dispensing by physicians has in it possibilities to be deprecated is pretty nearly certain.

PERSONAL ADVERTISEMENT.

New York Journal of Obstetrics and Gynecology.

IN all medical societies the most persistent exhibitors and debaters, with few exceptions, may be divided into two classes; those who have nothing new to say but who say even this for the sake of having their platitudes appear in full in the journal which reports their society's proceedings and those who pretend to have something novel to report or exhibit to the world at large and who perform this unselfish task with precisely the same object in view, namely, free advertisement in a medical journal. The apparent difference between these two classes is in reality not very great, for both appear unfailingly on every occasion which promises an audience and both discuss every subject in an authoritative way which would be ludicrous were it not continued *ad nauseam*; both classes are united, however, in the common object not of advancement of medical truth but in that solely of personal advertisement.

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30
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DECEMBER						
S	M	T	W	T	F	S
..	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31
..

State Societies.

NOVEMBER.

27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.
16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.
THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 2d Friday and 4th Monday, at 8.15 P. M.
MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. HENOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
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WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PHARMACEUTICAL.

DIARRHEA.—In the diarrheas of children due to fermentation and decomposition of food in the alimentary tract I have found Listerine of marked benefit. I have also used it with satisfactory results as a local application in stomatitis, ulcerative sore mouth, diphtheria and croup.—J. P. KINGSLEY, M. D., Professor of Physiology and Clinical Professor of Diseases of Children, Missouri Medical College.

I HAVE had "catarrh of the head" for a number of years, and have been treated in the usual manner and have used many of the so-called remedies without effect, except for temporary relief. And having suffered for weeks much more than usual from the inflamed passages, it occurred to me that as Resinol was so good for more exposed surfaces, why not for the nasal passage. I applied it by means of the little finger inserted as far as possible up the nose. The first application afforded relief, and now after using less than half of a sample box I am more free from catarrhal symptoms than I have been for years, though I have not used it for more than a week. I believe it to be superior to any remedy that has ever been suggested for this very universal and intractable disease.—C. C. BRADBURY, M. D., St. Louis, Mo.

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SURGERY FOR TYPHOID PERFORATIONS.

By Joseph Price, M. D.,
Philadelphia.

READ BEFORE THE PHILADELPHIA COUNTY MEDICAL SOCIETY, OCTOBER 28, 1896.

I SUBMIT the following report of cases operated on for typhoid perforation for the lessons they may convey and will discuss them from the standpoint of our more recent experience.

CASE I.—Mrs. A. O., aged thirty, having several children, but without a history of miscarriages, was admitted to the hospital on October 2, 1896. She was seen by Drs. Hughes and Owens in consultation after some three weeks of illness, with a typical history of typhoid fever. Operation was performed on October 1. Symptoms of perforation were present, with well-localized attacks of peritonitis and an irregular and ill-defined tumor on the right side. Omentum and small bowel were found adherent in the region of the ileo-cecal valve. The adhesions were easily freed and two perforating ulcers, six inches apart, were found. The lower one, situated a few inches from the valve, was large, irregular and necrotic; the second one was higher up in the bowel, about one-half inch in length, well defined and less healthy in appearance.

A puddle of filthy fluid was found about the perforations and the omentum and appendix were also involved in the adhesions. The infected portions of the omentum and appendix were removed. The holes in the ileum were trimmed and sutured and an irrigation toilet was

followed by both glass and gauze drainage. The mesenteric and retroperitoneal lymphatics were generally enlarged and easily recognized by touch and sight. Recovery ensued without a hitch.

CASE II.—Mrs. B. K., a married woman, aged twenty-six, with two children and a history of one miscarriage, was admitted to the hospital on June 4, 1896. She had a rapid pulse and high temperature and appeared to be in a decided septic condition. Peritonitis was quite general and alarming emaciation had taken place apparently as a result of some lung trouble. Section was made on June 5. General adhesions were found in the region of the ileum and right groin. When all adhesions had been freed, a large, ragged perforation was found in the ileum, with circumscribed accumulation of bowel contents. The perforation was trimmed and sutured. After an irrigation toilet, glass and gauze drainage were provided. Recovery followed. For two days following the operation the pulse remained high and feeble. The temperature also was high and this was considered rather favorable. This patient had been very ill for two weeks before admission to the hospital. The character of the ulceration was doubtful as there was tuberculous trouble in the

lungs. The closure of the fistula after suturing is rather against tubercle, as tuberculous fistula rarely close by suture.

CASE III. — Mrs. R. B., a married woman, aged twenty-eight, without children and without a history of miscarriages, came under observation after three weeks of illness and treatment for typhoid fever. She was admitted to the hospital on January 5, 1895, and went into collapse soon afterward, being unconscious at the time of the operation. On January 6, section was undertaken, freeing all adhesions, stitching multiple bowel-fistula, detaching lymph from the bowel with gauze. There was a general angry peritonitis, with filthy bowel contents, and filthy inflammatory products throughout the peritoneal cavity. Gaseous distention was marked and the peritoneum had a decided fecal odor. Thorough irrigation and drainage were practiced. I never attempted to close a filthier peritoneal cavity than this, either ante-mortem or post-mortem. Recovery followed. There were present at the operation Dr. N. Fred. Essig of Spokane, Washington; Dr. Samuel S. Q. Robinson of the U. S. Army; Dr. Harold Bunn of California; Dr. John F. Roeder, Dr. H. S. Lewers and Dr. Garden of Philadelphia.

Notwithstanding the great progress medical and surgical science has made, typhoid fever continues to present many complex and difficult questions. It must be classed among the most grave troubles with which the profession has to deal. Little is known about the disease, other than of its more objective symptoms. There is no exactitude or certainty in its treatment, which is rarely the same by any two physicians. The treatment begins with guesses and grows into some degree of certainty only as conditions improve. I will not attempt to deal with the larger circle of facts connected with typhoid fever, but will restrict my discussion to the surgical treatment of typhoid perforation.

Again, we have a wide divergence of opinion as to the propriety or wisdom of operation. There is no very general accord of opinion as to prognosis or the

definiteness and reliability of symptoms—as to reliable evidence of perforation—nor is it agreed that all these cases prove fatal.

Dr. Reginald H. Fitz of Boston has furnished valuable data as the result of a study of the work of the earlier investigators as to the fatality of typhoid perforation. Louis, Chomel and Jenner have reported numerous cases of typhoid perforation, but none of recovery. Tweedle says: "Intestinal perforation is always fatal, generally within thirty-six hours." Some more recent authorities make more favorable reports, others agreeing with the earlier authorities as to the almost certain fatality.

Griesinger holds that there is a possibility of the healing of a perforation and of recovery "never in cases of general peritonitis, only when the inflammation is wholly circumscribed. The rare exceptions are hardly worth considering in connection with the prognosis, which is to be regarded as almost fatal when the symptoms of perforation are distinct, and as absolutely fatal when gas is present over the liver." Murchison, who has contributed much that is valuable to the literature of the subject, says that "rare cases are met with where recovery ensues after all the symptoms of peritonitis from perforation." Dr. Reeves reports that: "I have seen in five instances all the symptoms which announce and follow perforation of the bowels, yet the patients recovered." Dr. Loomis, in discussing the subject, says: I do not remember to have seen a single recovery after there were unmistakable evidences of intestinal perforation. Recovery from a local peritonitis complicating typhoid fever is not uncommon, but when the characteristic symptoms of intestinal perforation are present, in my experience, a fatal issue soon follows." So we have the weight of authority on the side of almost certain fatality.

In the reported cases due allowance must be made for errors of diagnosis. In many of these cases the diagnosis was not made until post-mortem examination revealed the characteristic typhoid lesions. Had recovery taken place,

much doubt would have remained in the mind of the operator as to the real nature of the perforation. We know that typhoid perforations are the most common variety of perforations and the perforation is usually in the ileum.

As to the mortality in cases of the perforation of the bowel, Dr. Osler gives recent statistics: "In 114 cases of the 2000 Munich autopsies (5.7 per cent.) and in fourteen instances in my series, the intestine was perforated and death caused by peritonitis. The perforation may occur in ulcers, from which the sloughs have already separated, or it may be directly due to the extension of a necrosis through all the coats. In only a few cases is the perforation at the bottom of a clean, thin-walled ulcer. In one instance the perforation occurred two weeks after the temperature had become normal. The sloughs were, as a rule, adherent about the site of the perforation. A majority of the cases were in small, deep ulcers. There may be two or even three perforations. The orifice is usually within the last foot of the ileum. In only one of my cases was it distant eighteen inches. Peritonitis was present in every instance.

Hemorrhage from the bowels occurred in ninety-nine of the Munich cases and in nine of my series. The bleeding seems to result directly from the separation of the sloughs. I was not able in any instance to find the bleeding vessel. In one case only a single patch had sloughed and a firm clot was adherent to it. The bleeding may also come from the soft, swollen edges of the patch. Peritonitis without perforation may also occur by extension from the ulcer, or, occasionally, by rupture of a softened mesenteric gland. It was present in 2.2 per cent. of the Munich autopsies.

The question is direct, What chances does surgery offer? The one and only chance left. We know the almost inevitable sequel in one case and something of the possibilities in the other. The one means death, the other gives a chance of recovery. The error, to put it mildly, consists in abandoning these cases as absolutely hopeless, when there

is yet one last resort—surgery—which furnishes precedents of encouraging success. I am not venturing upon entirely new ground. Dr. James C. Wilson, the honored President of this Society, a clinician of wide experience, stands among the first, if not the first, to advocate, in clear, unequivocal language, surgical dealing in these cases. Dr. Hunter McGuire of Richmond, Va., a worthy supporter of the fame of the old school of surgeons, recommends the tying of vessels to control hemorrhage from ulcers in typhoid fever. He recognizes that too many are lost from this cause and suggests an original and ingenious method of suturing to control the hemorrhage and avoid necrosis. We are slow in following the lead these men take, slow and hesitating in adopting their urgent suggestions, in coming down from our theoretical lofty height. All our surgical procedures have made their way in the face of relentless criticism and opposition. Surgical interference, in cases of typhoid perforation, has not proved an exception. Largely, the difficulty lies in timidity and oversensitiveness as to professional repute. The protective character of adhesions are often misleading, tending to lull apprehension as to immediate existing risks to life. The condition is too frequently classified for non-interference—left to the processes of nature—when parts are weakened and poisoned beyond the kindly healing and remedial processes of nature. We find, occasionally, recorded deaths from spontaneous perforation due to chronic local peritonitis. The history may be that of localized attacks of peritonitis—with doubtful evidence of perforation—the localized attack resulting simply in adhesions about the ulcer. If the adhesions are well-formed, the escape of gas and bowel contents will be limited when perforation occurs.

The patching or fortification by adhesive and protective peritonitis, avoiding acute general peritonitis and sepsis, gives us the most favorable class of cases for surgery. Localized peritonitis, with adhesions, with or without perforation, around an ulcer, with sufficient

adhesive and inflammatory product to form a small tumor, is quite easily recognizable in an emaciated patient. An eminent surgeon says, in connection with these cases, that which cannot be accepted as safe dictum :

"Surgeons are not justified in performing laparotomy for the suturing of perforated typhoid ulcers, if circumscribed peritonitis of an adhesive or protective character exist, or is in process of development."

The trouble, as with all intestinal affections, is a hidden one, not one directly addressed to our vision. We cannot determine with any large degree of certainty, even from a few marked objective signs, the extent of the protective character of the adhesions, nor determine anything certain as to the character or extent of the process of development. We know the sequence in the majority of these cases where there is no interference. Perforations or fistulae due to ulceration and sloughing rarely close. Almost all such ulcers are surrounded by adhesions, with pus, bowel contents, fistulae and fistulous openings. Complications become general, keeping the patient in a miserable condition; emaciated and anxious, with a rapid pulse, cold, clammy and greatly wasted. Fistulae of viscera, due to incision or surgery, commonly close spontaneously. Not so, however, when due to sloughing. Unfortunately, we are not always aided by the clinical history in our diagnosis. We are directed or guided largely by the patient's general condition, the peritonitis or the small and ill-defined tumor.

There is but little difficulty in settling the fact that the patient is dying of some intra-peritoneal lesion. Errors are rarely made in opening the abdomen. Suture methods for repair, after careful trimming of the ulceration, give the most pleasing results. Excisions or resections have nothing to recommend them. The open treatment, when the conditions are desperate, and sepsis and bowel distention very marked, favors peritoneal and bowel drainage of all contents. An abundance of gauze placed about the fistula in the shape of a square

coffer-dam favors simple drainage and avoids contamination. The large mortality has been largely due to clumsy and imperfect work. Everything within the abdomen is intolerant of bungling manipulation. The surgery is not to be gone at with that awkwardness with which a man would try to put his five fingers in a glove with four. The delicacy of the condition of the parts, which the very nature of the disease creates, requires in the surgeon the use of fingers delicate and sensitive of touch and deft in use. The repair of perforations, commonly single, rarely multiple, is easy and should be rapid. There may be some delay in the seeking and finding the point of perforation, but the well-defined nature of the pathological condition at that point is easily recognized by fingers familiar with normal intra-peritoneal conditions. The deviation from the normal can be instantly recognized when the fingers are passed through the viscera without exposure. The cluster of adhesions, omentum and bowel about the perforation are easily freed. The cleansing, local and general toilet, are of great importance. Rarely do we find distention associated with perforations, except in the delayed cases, on the third or fourth day after perforation.

In delayed cases the mass is well marked; paresis of the bowel with over-distention is prominent. The characteristic fecal odor is recognized at once upon opening the abdomen. This is most marked in the acute cases in those dying soon after perforation. If the adhesions are well formed about the perforation, a fecal odor is rarely present. When patients are under observation, the diagnosis made early, the disease running a uniform course with a definite train of symptoms, the characteristic morning remissions and evening exacerbations, and about the third week a copious intestinal hemorrhage takes place with the patient sinking into fatal collapse, with a quick pulse, sub-normal temperature, the symptoms admit of but one interpretation, and point to but one possible source of relief.

In the very nature of things, from the

very character of the trouble and the parts attacked, the mortality will always be large; but some can be saved. The stimulus of anesthesia increases the force of the pulse, the patient's respirations deep, and at the completion of many of these operations the patient's general condition is often better than before the operation. An irrigation toilet, aside from having great value for cleansing, is a stimulant to the solar plexus and favors reaction.

The same principles apply in these cases of typhoid perforating ulcers that apply in cases of general septic or purulent peritonitis and to stab wounds and gun-shot wounds. The words of Dr. D. Hayes Agnew, who, in his day, was the sovereign spirit of American surgery as applied by him to gun-shot wounds of the abdomen, applies with equal appropriateness to typhoid perforations.

He says: "I want to place myself upon record, for I have very strong convictions with regard to laparotomy. They amount to this: If there is a reasonable degree of evidence that there is a penetrating abdominal wound, especially if a shot-wound, it is our duty to open the abdomen, to make an exploratory incision. We are not to be deterred by the possibility of some legal technicality, if the case should come into court. We are to do our duty without reference to consequences."

I will quote extensively from Dr. J. C. Wilson, for nothing better has been said upon the subject:

"I take it for granted that almost every case of free extravasation of intestinal contents, however small in amount, into the peritoneal cavity terminates fatally. There is little reason to believe that any case of this kind recovers. It is important to note that the cases of peritonitis in enteric fever in which recovery is possible can be clinically distinguished from those which will terminate rapidly in death. The clinical picture of the two conditions is almost as distinct as are the pathological lesions. Where there is extravasation of the intestinal contents into the peritoneal cavity, the collapse is like that caused by the escape of an amount of foreign matter,

the result of a perforating gun-shot wound of the intestine. The proposition which I submit for discussion arises directly from a consideration of the matter in this way. Until within a few years, no surgeon realized the possibility of treating cases of gun-shot injury of the abdomen with perforation of the intestine and the escape of blood and fecal matter by the operation of laparotomy, washing out the peritoneal cavity, excising bruised and lacerated portions of the intestine, and bringing the parts together by suture. Yet this is now the recognized procedure in such cases, and has been of late practiced in many instances with success in cases that, under the old plan of opium and expectancy, would have inevitably perished.

"Are we ready to adopt the same measure in perforation of the intestine with similar conditions as regards the peritoneal cavity, and a like helplessness as regards cure by opium and expectancy in our cases of enteric fever? Recognizing the two groups of cases I have described, and being, as we are, able to refer almost all cases to either one or the other of them within a few hours of the development of the symptoms, are we prepared to decide — and to do so with the necessary promptness — upon those operative procedures by which alone in the second group the life of the patient may be saved?

"Granted that the chances of a successful issue are heavily against you; that the patient is in the midst or at the end of a long sickness; that his tissues are in the worst state to stand the injuries of the surgeon's knife; that the lesions of the gut may be very extensive; that the vital forces are at the lowest ebb. No one yet has hesitated to perform tracheotomy in the laryngeal complications of enteric fever, which require it to save life, for these reasons."

The operative treatment of purulent peritonitis has been performed many times successfully by the gynecologist in conditions scarcely less unpromising. In point of fact, the objections that may be urged against laparotomy in intestinal perforation in enteric fever are no more forcible than those which would

have been made use of at first against the same operation in gun-shot wounds of the abdomen. The courage to perform it will come of the knowledge that the only alternative is the patient's death. Dr. Wilson, with his advanced, pioneer views in this connection, does not furnish the first illustration of the physician taking the lead of the surgeon, furnishing the guiding, the impelling thought, not infrequently the courage.

About seven years ago the American Surgical Association and the Association of American Physicians discussed, at the same time and in the same building, the relative merits of surgical and non-surgical interference in appendicitis, the medical body deciding in favor of prompt operative interference, the surgeons for delay. Almost coincident with Dr. Wilson's advocacy of celiotomy for the relief of intestinal perforation in typhoid fever, Dr. Lewis S. McMurry of Louisville, Ky., performed an operation, the subject being a physician, and found multiple perforations. He trimmed the holes, closed them with sutures, irrigated and drained, recovery following. A report of this case, with the patient present at the time, was made at the Cincinnati meeting of the American Medical Association.

There is another recorded case—that of McArdle of Dublin. The history is one of abscess and multiple perforations following an accident, occasioned by jumping from a wagon.

The accident is not a very satisfactory explanation of the trouble in this case. The evidence better supports the conclusion that the case was one of walking typhoid fever with multiple perforations. I might refer to cases in my own experience and that of others, in which the history was doubtful. A considerable number of operations for circumscribed abscess have been reported as successful. Many of these cases are quite as questionable in their history as are those for which post-mortem operation has been done or refused.

In this connection Fitz says :

"Although the reported instances of the successful results of an operation for the cure of circumscribed peritonitis in

typhoid fever are comparatively few, I have been able to collect a considerable number in which recovery resulted from resolution or from the spontaneous evacuation of the inflammatory product. In seventeen cases of recovery by resolution the peritonitic attack began in the second week in one, in the third week in eight, in the fourth week in one, in the fifth week in one, and in the sixth week in two. It began at the end of the fever in one, and during convalescence in three. Recovery took place in a week in one, in two weeks in three, in three weeks in two, in four weeks in one, and in two or three months in three. The length of time necessary for recovery in the remaining cases was not stated."

It is a mistake, on the part of gynecologists and obstetricians, to apply the term typhoid fever to certain septic conditions. The sponge-tent, the curette, the sound and a variety of minor gynecological operations have been followed by septic conditions and abscesses, frequent pulse, high temperature and diarrhea—simulating typhoid fever.

Obstetricians are in the habit of reporting septic cases under the head of malaria. The recorded mortality is largely from the prolonged anesthesia of a patient already enfeebled and with a greatly weakened heart, and the great length of time taken in the operations. They will not stand prolonged anesthesia or a prolonged operation. In a large percentage of those dying after long anesthesia and operation, death is due to causes within the surgeon's control.

One of the common causes complained of is that of weak, unhealthy tissue, and the yielding of sutures. Herein lie two errors—the choice of needle and that of suture-material. The best needle is that from the woman's sewing-case—a fine, round needle, and O or OO Chinese silk.

Early diagnosis, early operation, painstaking, rapid work will save many lives.

Courage goes hand in hand with reverence for human life. There is much force in what Napoleon said to Las Casas : "As to moral courage, I have rarely met with two o'clock-in-the-morn-

ing kind. I mean unprepared courage, that which is necessary on an unexpected occasion, and which, in spite of the most unforeseen events, leaves full freedom of judgment and decision."

It is two o'clock-in-the-morning courage we need—the factor that goes largely to settle the result in many surgical cases for us is the lost quarter of an hour.

THE PERFECT SURGICAL NEEDLE; WITH REMARKS ON COMMON DEFECTS IN NEEDLES.

*By John B. Roberts, M. D.,
Philadelphia.*

READ BEFORE THE PHILADELPHIA COUNTY MEDICAL SOCIETY, OCTOBER 28, 1896.

LITTLE attention has been given to the proper construction of the surgical needle, though it is an instrument of great importance. A perfect surgical needle should be adapted for use by the surgeon's fingers without the interposition of any other instrument; its point should emerge exactly where the operator wishes; it should quickly and easily carry the suture through the skin or other tissue and should be serviceable for sutures of silk, catgut, tendon, silk-worm-gut, or wire.

The first proposition condemns as imperfect all needles that require a needle-holder. It always surprises me to see an operator encumber his fingers with a needle-holder in suturing ordinary cutaneous wounds. The explanation is probably to be found in the unsatisfactory needles often employed. The fingers are always better than any other needle-holder, unless the stitch is to be introduced at the bottom of a cavity, where the fingers cannot reach the wound. In cleft-palate operations and in vaginal surgery, needle-holders are necessary. Under nearly every other circumstance it is better to introduce the needle with the fingers.

Accuracy in directing the point of a needle, after it is buried in the tissues, and in bringing it out at the desired spot, is best attained by using a straight needle. It is difficult to ascertain the exact position of the point of a curved needle when it is once out of sight. This is attested by the frequency with which operators have been stuck by the point of a curved needle making its exit

at an unexpected place. This uncertainty is lessened, but not entirely obviated, by the use of needle-holders or needle-forceps, which prevent the needle turning after its point is buried. A straight needle, guided by the fingers, is the proper means of overcoming the difficulty.

In order to fulfil the third condition, the needle must be sharp, have an eye large enough to be readily threaded with catgut and make an opening in the tough skin sufficiently large to allow the head of the needle, with the two thicknesses of catgut, to pass readily. If catgut can be used in the needle, any other suture will go through its eye.

Within recent years various forms of needles have been offered by instrument-makers, but all that I have seen are inferior to the glover's needles which I have always employed. Some so-called surgeon's needles require so much force to drive them through the skin that a needle-holder or needle-forceps must be used both to insert and withdraw them. Some have such small eyes that they cannot be threaded with catgut; others cut such a small opening in the skin that the double thickness of the suture at the eye makes it almost impossible to drag the needle through.

Non-chromicized catgut, when softened with water, is probably the most bulky suturing material that we use. Surgical needles should therefore have eyes which can be satisfactorily threaded with this suture. They will then answer well for any other.

The perfect surgical needle which I

show is only a carefully made and slightly modified glover's needle—that is to say, the needle that has for many years been found satisfactory to those who are continually sewing animal skins in the manufacture of gloves and leather articles. The requirements are practically those pertaining to suturing ordinary cutaneous wounds. I doubt if any argument would induce a workman who stitches leather gloves or furs by hand to exchange his straight needle for the needle-forceps and curved, or otherwise defective needles often seen in operating rooms.

A needle has a point, a shaft and a head. In the last is the eye. The perfect needle shown has a three-sided point, made like a trocar, and is very sharp. The sides of the slender trocar, as it may be called, must be exactly alike, so that the point will not resemble a bayonet, which has one of the sides wider than the other two. Someone, ignorant of the requisites of a surgical needle, has introduced to instrument-makers a bayonet-pointed needle. It is, in my opinion, inferior to the glover's needle.

The trocar-like point should occupy above one-third of the needle's length. The greatest diameter of the point should be near its middle. Although the end of the point should be very sharp, its three edges should not be keen, lest they cut the fingers when the operator pulls the needle through the skin.

The three-sided point gradually fades into the shaft, which must be cylindrical, not flat, and have a diameter a little less than that of the point where it is largest. The shaft then gradually tapers down towards the head, which must have a little less diameter than the thickest part of the shaft. The eye must be large and oval or rectangular; not circular. The head, at the sides of the eye, must not be caused to bulge outwards by the drill or punch which makes the eye. Behind the eye the head must be grooved on both sides; in the groove lies the thread, which consequently presents no shoulder to catch as the needle passes through the skin.

There is a groove in front of the eye on each side to render cleansing easier and to keep it free from dried blood and dirt.

The reasons for the characteristics of this needle will be apparent if one thinks for a moment of the work that a needle is intended to perform. It must make a hole in skin, a tough, fibrous tissue. The skin is very different from the woven materials sewed by the seamstress or tailor by means of a round or cambric needle. The instrument used by the surgeon, when he wishes to puncture a subcutaneous cyst by a small opening, is a trocar. A needle should have a similar point, which should be thrust through the skin with a sudden push very much as a trocar is used. Some operators erroneously use a needle with the slow movement used in putting a pin into the end of a roller bandage.

In the second place, the opening made by the introduction of the needle must be enlarged so that the shaft of the needle and the eye containing the thread may be drawn through it easily. This point is attained by having the point increase in diameter like a pyramidal wedge. When sufficient diameter has been given to effect this object the needle tapers down. The eye, with the threaded suture, therefore requires less or very little more space in going through the skin than the thickest part of the point and glides through without catching or requiring force on the part of the operator.

To get the best service out of a needle the operator should occasionally sharpen its point on an oil-stone; and always select a needle large enough for the work. If the skin is thin and soft, as in the eye-lids, a small needle may be used; but when the incision to be closed is in thick skin, a comparatively large needle is required to penetrate the tissues readily and easily.

A convenient method of preventing the needle becoming unthreaded is to tie the short and long ends of the thread together at the eye by a half-knot. This is quickly done when the needle is threaded for use, and the half-knot is readily pulled out, if it be necessary to

thread the same needle again after the suture has been used up. This tie serves to bury the thread in the grooves behind the eye. If a proper relation between the size of the needle and that of the thread exists, the knot will not catch as it is drawn through the skin.

In contrast with the perfect needle, I show a series of twelve needles, all of unsatisfactory shape, most of which are extensively used at the present time. Several are curved and hence difficult to direct, whether bent only at the end or throughout their entire length. One has a beveled point like a hypodermic needle, is cylindrical except at the very ends and is wider at the eye than anywhere else. Nothing could be less well adapted to the purpose of a needle for cutaneous wounds.

Another—the Hagedorn needle—has a slender rod-like shaft, with a point sharpened like that of a knife. It is sure to go through the skin with difficulty, because it must catch where the suture makes a shoulder or ledge at the eye; and is very likely to cut the surgeon's finger when he attempts to pull it through the skin. I believe this needle was originally advocated because it cuts a slit at right angles to the wound and the stitch, which lies in the end of the slit, tends to draw its sides together. Other needles were said to be less desirable because they had a tendency to make a wound with its long diameter parallel to the wound to be sutured. The tension of the stitch would, it was

assumed, tend to draw this puncture open and afford an entrance for infection. This reasoning is merely theoretical and of no value. The thread, as a rule, nearly or quite fills up the puncture and if the needle-wounds are exposed to infective germs, the thread itself probably acts as a route by which they enter the tissues. Metallic sutures are less liable to act in this way.

One of the other needles that I dislike is cylindrical and of greater diameter at the eye than at any other part. Its unavailability is apparent. It may not have been originally intended for surgeon's use, but I bought it at an instrument-maker's. The bayonet-pointed needle I have already condemned, though it is very much better than the others. Another unsatisfactory form has a flat shaft and a point somewhat like the head of a spear. Its fault lies in the fact that its widest diameter is not in the same plane as that of the thickest part of the threaded needle, which is at the place where the suture occupies the eye of the needle.

Finally, I show three needles which have a trocar-like point similar to that which I call the perfect needle. They are, however, exceedingly bad, because the points do not make a puncture big enough to allow the shaft and eye of the needle to traverse the skin with ease. No adequate provision is made in them to dilate the wound or to have the aftercoming head of less size than the shaft of the needle.

THE ORIGIN AND SPREAD OF CONTAGIOUS DISEASES.—Dr. W. H. Faulds of Luzerne, Pa., records in the *Medical News* his thoughts on the origin and spread of contagious disease.

1. That non-virulent microbes exist in all parts of the habitable globe.

2. That they were made disease-producing in the case of cholera, smallpox, syphilis, diphtheria and tuberculosis, in the thickly populated centers of the Old World through overcrowding and bad hygienic conditions.

3. That the virus is always derived from a previous case and is spread,

either directly or indirectly, through human intercourse.

4. That increased vital resistance renders persons immune only in tuberculosis and other exceptional instances.

5. That if virulent bacteria could be prevented from finding a lodgment in human tissue, they would, for want of nutritive pabulum, soon return to their primitive dormant state.

6. That isolation, quarantine and disinfection, under the direction of bacteriologists, are the only means by which we may hope to successfully prevent the spread of contagious diseases.

A NARROW ESCAPE FROM DEATH DURING CHLOROFORM NARCOSIS.

By Eugene Lee Crutchfield, M. D.,
Baltimore.

READ BEFORE THE BALTIMORE MEDICAL ASSOCIATION, OCTOBER 12, 1896.

On the 22d of September, 1896, I administered chloroform to J. S., aged 26 years, white, for my friend Dr. Alfred Whitehead, who operated for the cure of a fistula. Every precaution was taken to guard against the dangers of anesthesia from this drug. Whiskey, (3ss.) was administered beforehand, and I charged my hypodermic syringe with nitro-glycerine (gr. $\frac{1}{100}$) so as to have it in readiness if it should be needed.

The operation was about half completed when the patient suddenly ceased to breathe, the pulse became imperceptible, and the eyes were set like those of a corpse. To all appearances he seemed dead, and both Dr. Whitehead and I feared that such was the case. I immediately injected the nitro-glycerine under the skin, and we got him off the table down on the floor, upon which Dr. Whitehead suspended him by his legs (thus employing Nélaton's method) while I resorted to Sylvester's plan of artificial respiration. We then called two strong men from the shop underneath to hold him up by his legs so that Dr. Whitehead could continue the alternate elevation of the arms and their compression against the sides of the thorax while I gave him two hypodermic injections of whiskey.

After he had been suspended a little while I noticed that a reddish tinge was supplanting the intense pallor of the face. This showed that the blood was gravitating to the head. By thus relieving the cerebral anemia produced by the chloroform the respiratory and cardiac centers were stimulated. This is the rationale of Nélaton's method. Almost immediately after we had commenced the employment of Sylvester's device for exciting respiratory movements we heard a faint gasp and a little later we perceived a flicker of the pulse. These welcome indications continued to

become more and more favorable until we soon had the satisfaction of knowing that he was out of danger although he was still under the influence of the anesthetic. The operation was then finished without any more chloroform.

Dr. Whitehead, who has had a very extensive experience with chloroform in several large English hospitals, as surgeon in the service of the Peninsular and Oriental Steamship Co., and in private practice, says that this was the most narrow escape that he has ever witnessed. He has seen one death from chloroform. This was certainly the most serious case of the kind that I have ever seen.

In the MARYLAND MEDICAL JOURNAL of January 23, 1892, I published the report of a case in which the patient stopped breathing, but the pulse could be felt. He was restored by Nélaton's method. April 10, 1893, I gave chloroform to the mother of this patient while Dr. Thos. P. McCormick dilated a stricture of the urethra and examined the bladder. She, too, ceased to breathe but the pulse remained perceptible. She was resuscitated by Nélaton's method and compression of the chest. In these two cases possibly idiosyncrasy of an hereditary character was accountable for this phenomenon.

In a considerable experience in the administration of anesthetics I have had the breathing grow weak or the pulse to become feeble on several occasions, but never until September 22, 1896, did I have both to fail so completely. I am in a position to speak thus minutely since I keep a record of every time I give an anesthetic, in which are mentioned all the particulars of the case, with the name of the operator. But I keep account of only those cases in which I myself am the administrator. I have no record of those instances

(which are numerous) that I have witnessed, when others have given the anesthetic, nor of those cases in which I performed the operation, except a few when I both gave chloroform and operated without medical assistance. However, inasmuch as I have a good memory (as my friends tell me), I can confidently assert that this is the most serious case of the kind that I have ever seen in my life.

The most important consideration in the management of cases of this nature is to retain your presence of mind. Whatever may happen, do not lose your head. Had either Dr. Whitehead or I become disconcerted on this occasion, precious time would have been lost and a life might have been sacrificed. Among the means at our disposal under such circumstances are Nélaton's and Sylvester's methods and the hypodermic use of such stimulants as whiskey, brandy, digitalis, strophanthus and nitro-glycerine.

The subcutaneous use of strychnia is especially serviceable to stimulate the respiratory centers. Electricity is an efficient therapeutic force, but in nine cases out of ten the anesthetizer will not have his battery with him when he most needs it, and then, too, it will require time to start it. A good plan is

to have the hypodermic syringe already charged with digitaline (gr. $\frac{1}{100}$), nitro-glycerine (gr. $\frac{1}{100}$), and strychnia sulphate (gr. $\frac{1}{60}$) in case of an emergency. This combination will stimulate both cardiac and respiratory centers. It will also produce an effect that is both prompt and lasting.

The hypodermic injection of morphia alone, or of morphia and atropia combined, given before the inhalation begins, has been recommended on the grounds that the chloroform or ether narcosis is rendered safer and more prolonged with a less quantity of the anesthetic, the danger of cardiac paralysis is diminished, and the subsequent nausea and depression are prevented. Once during the operation when the pulse became feeble I tried this plan with a most happy result.

Within the past four or five years dilatation of the rectum has been advocated when the breathing stops. I have had no experience with this mode of treatment. Above all things, however, remember that success depends upon promptness of action. Therefore, keep cool. Had Dr. Whitehead and I not done so, chloroform might have been blamed for another death, whereas the censure would properly have belonged to the medical attendants.

PUERPERAL NEURITIS.

DR. GEORGE KÖSTER relates in the *Lancet* the case of a woman aged twenty-five years, formerly always healthy, who fourteen days after a normal labor began to suffer from pain and weakness in the left arm. There was no preceding rise of temperature, but the upper arm soon wasted. There was tenderness on pressure over the radial and musculo-cutaneous nerves and some slight impairment of sensibility was noticed. There was the reaction of degeneration in the deltoid and biceps. The rest of the muscles were normal, but in the brachialis anticus, although at first the reaction was normal, after twelve weeks in that muscle also there were wasting and sluggish reaction. After eight months, in spite of daily

treatment by massage, there was complete loss of reaction in the deltoid, biceps and brachialis anticus. There was at first a patch of anesthesia with a part at which there was hyperesthesia, but this in time cleared up completely; but over the lower part of the deltoid another patch developed with complete anesthesia and simultaneously with the development of this there was a cessation in the spontaneous pains and there was no longer tenderness on pressure. The writer regards the condition as the result of toxins arising in connection with the uterine condition after labor; but the case is unusual in the severity and permanence of the damage to the motor structures. Complete recovery, or at least much improvement, is the usual rule in such cases.

Correspondence.

HAGERSTOWN MEETING.

HAGERSTOWN, November 11, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—The semi-annual meeting of the Faculty is a thing of the past for this year, and a most successful meeting it was. The Baltimore members went up by train and the neighboring physicians came from all directions, some by train and some drove. West Virginia and Pennsylvania were represented as you may see by the names. Dr. Humrichouse was at the station and welcomed us most cordially and we went up to the Hamilton House. Many of the physicians threw open their houses to the visitors and the clubs received them also.

The proceedings I shall send you later, but I want to say now that never has a semi-annual meeting been so well attended. On Tuesday night there were between 100 and 125 present and there was always present a large and appreciative audience.

While most of the papers were by Baltimore physicians, the discussions were taken part in by all. We usually pay for our own banquet at these meetings, but the Washington County Medical Association, with the same liberality which it showed seven years ago, insisted on treating us as its guests and we gracefully acceded. The banquet was very elaborate and although there were no set speeches, many had an opportunity to make themselves heard. Messrs. Parke, Davis & Co. of Detroit, Fairchild Brothers & Foster of New York, F. Arnold & Son of Baltimore, and the Edison Company were all represented there.

Among the physicians noticed at the meeting were the following:

Baltimore—J. C. Hemmeter, George J. Preston, J. Whitridge Williams, J. M. Hundley, S. K. Merrick, George H. Rohé, J. Fussell Martenet, Samuel J. Fort, Jr., William Osler, Simon Flexner, William B. Canfield, J. M. T. Finney, Frank Martin, Randolph Winslow,

J. E. Gichner, H. O. Reik, H. G. Prentiss, E. M. Schaeffer, W. F. A. Kemp, D. Z. Dunot, John Mackenzie, E. N. Brush, John S. Fulton, J. R. Abercrombie.

Hagerstown, Md.—E. A. Wareham, H. S. Herman, C. R. Scheller, E. M. Schindell, A. S. Mason, T. W. Simmons, J. W. Humrichouse, Richard Vealhoker, R. L. Edwards, N. B. Scott, J. McPherson Scott, W. B. Morrison, Clara S. Eirley, O. H. W. Ragan, H. K. Derr.

Clear Spring, Md.—A. Shank, J. P. Perry, Charles Mason.

Fair Play, Md.—V. M. Reichard.

Smithsburg, Md.—E. Tracey Bishop, J. M. Steck, C. L. G. Anderson.

Leitersburg, Md.—J. W. Wishard.

Ringgold, Md.—J. Protzman.

Boonsboro', Md.—S. S. Davis, J. M. Gaines.

Elkton, Md.—C. M. Ellis.

Emmitsburg, Md.—Robert L. Annan.

Williamsport, Md.—S. K. Snively, S. W. Richardson.

Middletown, Md.—E. L. Beckley.

Keedysville, Md.—W. M. Nihiser, Edward Lowman.

Thurmont, Md.—E. C. Kefauver.

Funkstown, Md.—C. Z. Wingard.

Lonaconing, Md.—J. D. Skilling.

Welsh Run, Pa.—H. B. Chritzman.

Chambersburg, Pa.—H. C. Devilbiss, R. W. Ramsey.

Mercersburg, Pa.—D. F. Unger.

Hanover, Pa.—A. C. Wentz.

Mason and Dixon, Pa.—D. C. R. Miller, Wm. Prentiss Miller.

Harper's Ferry, W. Va.—W. H. Gannon.

Charlestown, W. Va.—William Neill.

New York.—C. C. Fite.

STATE BOARD OF HEALTH.

BALTIMORE, November 13, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—I observe in the MARYLAND MEDICAL JOURNAL, of November 7, that you have fallen into an error in your editorial statement, in saying that "There has been up to the present time what may be perhaps called a lack of harmony throughout the State among

the general and local health officers, so that there was lack of coöperation."

Permit me to say that this statement is wholly apart from the facts, as is shown by the two biennial reports—the tenth and eleventh—covering four years, the most complete harmony and coöperation existed at all times. The only want of coöperation that existed, if that may be so called, was the failure of the physicians of the State, including the local health officers, to make reports of vital statistics, but that was not the result of any antagonism of feeling, but of the defect of the existing law relating to vital statistics and the inadequacy of the appropriation provided for the purpose.

It is now a source of both amusement and satisfaction to me to see the State Board of Health, after having forced me to resign, because I had failed to collect vital statistics of the State, comes frankly forward and admits its total inability to do so and seeks to divert the small appropriation made for that purpose to another use. I feel sure that you would not willingly allow an incorrect statement in your valuable journal to go uncorrected.

Very truly yours,

JAMES A. STEUART, M. D.

1611 John Street.

ADMINISTRATION OF ANESTHETICS.

BALTIMORE, November 14, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Your editorial on the "Administration of Anesthetics" in today's issue is certainly opportune. In the whole range of medicine I know of no one subject of more importance. It is apparently so simple, but in reality quite complex. To give an anesthetic properly demands on the part of the administrator the exercise of the greatest care and the possession of entire presence of mind. He must see (when giving chloroform) that the patient gets sufficient atmospheric air and be careful (when administering ether) not to press

the cone over the mouth and nose in such a way as to suffocate the patient. He must watch attentively the pulse, noticing its frequency, force and volume; the respirations, counting their number and observing their depth or shallowness; the complexion, as to whether pallor or cyanosis exists; and the position of the tongue, not allowing it to fall back over the glottis, in which case it will obstruct the breathing. Then, too, he must curb his curiosity, not looking at the operation, but giving his undivided attention to his own duty. Moreover, he must be ready to meet, without the slightest delay, any emergency that can possibly arise.

Taking all these facts into consideration, it is apparent to everyone that only physicians who are experienced in this line should be entrusted with the administration of an anesthetic and that students should have special instruction in this branch.

Yours very truly,

EUGENE LEE CRUTCHFIELD, M. D.

1232 E. Preston Street.

Medical Progress.

OCULAR MANIFESTATIONS OF EYE-STRAIN.—Ernest Clarke (London), discussing the various manifestations of eye-strain upon the eye itself, and their bearing upon treatment (*American Journal of the Medical Sciences*) states that blepharitis is invariably associated with an error of refraction; and that phlyctenular conjunctivitis has a marked association with ametropia, and the same is true of phlyctenular keratitis. In a large percentage of cases of scleritis he has found a marked error of refraction, and on correcting this with glasses the various remedies have worked like a charm. He believes the first and best treatment for recurrent iritis is correction of refractive errors. Eye-strain may cause an attack of glaucoma under favoring conditions, and there is a distinct association between astigmatism and cataract.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, NOVEMBER 21, 1896.

It is with great satisfaction that the success of the semi-annual meeting of the Medical and Chirurgical Faculty held at Hagerstown last week can be recorded. Through the energy of the president, secretary and committee of arrangements, programmes and letters were sent to physicians in the region around about Hagerstown and the consequence was that not only was Washington County well represented but Virginia and Pennsylvania contributed to the audiences.

The evening demonstration, that is of the pathology of typhoid fever and the Röntgen ray machine, were especially attractive. The visiting physicians, and particularly those from Baltimore and the eastern part of the State, felt as if they were very well treated, while the physicians of Washington County said that they were indebted to the visiting physicians for the success of the meeting.

Whatever may be said, it is true that seven years ago when the Faculty met at Hagerstown for the first time the physicians of that neighborhood were so filled with enthusiasm

that the Washington County Medical Association was reorganized and has done good work, with an active membership of 35 members since that first meeting.

While the discussions were fairly lively there was still that feeling that the reader of the paper knew more about his subject than his listeners and hence a certain modesty in speaking. Still there was some discussion and it was a pleasure to see that everyone took so much interest.

Several applications for membership to the Faculty were made, and it is likely as a result of this meeting that many new members will be obtained.

The president called the attention of all physicians to the fact that the library and nurses' directory could now be used by physicians of the State as well as in Baltimore. A long distance telephone will connect with the nurses' directory any time of the day or night, where competent nurses of both sexes and colors may be obtained. Physicians who desire to study a subject may have books sent from the library, provided of course the physician is a member of the Faculty and pays transportation charges on the books both ways.

A physician of Baltimore who recently went to the Surgeon-General's Library in Washington to look up a subject for a paper reported that with very few exceptions all the authorities that he wished to consult could have been found in the State library, the Faculty library, at home if he had known it.

The library is a valuable one and is alone well worth the small dues.

ONE of the most important pieces of work demonstrated at the recent Hagerstown meeting of the Faculty was the very clear and well prepared address of Dr. Simon Flexner on typhoid fever. Since Widall's important communication, pathologists all over the world have been testing the effect of blood serum from a typhoid patient on pure cultures of the typhoid organism.

Wyatt Johnston of Montreal has already simplified this method so that health boards may assist physicians in making a diagnosis of typhoid fever with certainty within twenty-four to forty-eight hours.

Already the New York and Brooklyn Boards

of Health have adopted this new diagnostic method and along with the tubes and swabs for the diagnosis of diphtheria, glass slides are left for physicians who wish to put between them blood of suspected typhoid cases to be reported on by the laboratory physicians.

The possibilities of municipal diagnosing stations make one dizzy in this free country. If the municipality looks after nuisances, disinfests after a disease, destroys contagion, examines sputum, secretions from the pharynx in cases of suspected diphtheria, and now examines the blood in suspected typhoid fever, how long will it be before the municipality takes entire charge of a patient and salaries the physician? But to come back from this wild frenzy.

The diagnostic point in the serum examination of supposed typhoid cases rests on the fact that very early in the course of typhoid fever, indeed within a day or two, the blood contains an antitoxine which, when added to a pure bouillon or other culture of typhoid organisms and observed in a hanging drop under a high power, shows that the typhoid bacilli lose first their motility, then tend to cling together and finally become rapidly disintegrated.

This method is still in the stage of experiment, but from the work done by Widal, Johnston, Pfeiffer, as well as the corroborative work done within the past few weeks at the Johns Hopkins Hospital, together with the fact that some city health boards have already adopted it, give promise of a great gain in the endeavor to stamp out typhoid fever.

A disease that can be recognized and treated early gives a much better chance for recovery and may be kept from spreading.

WHILE the new method of diagnosing typhoid fever attracted much attention at the Hagerstown meeting, none the less important should be the mention of the complication of gynecological operations and the puerperal period by genuine malarial fever which is only made certain by the blood examination.

Drs. John Whitridge Williams and J. Mason Hundley both reported cases in which supposed serious febrile complications after childbirth and a gynecological operation

were found to be due to malaria and stopped by quinine. Such work shows the value of blood examination and should be recorded.

AMONG the diseases which seem on the eve of explanation in the light of the germ theory, none is more interesting to the practitioner than common rheumatism.

The Causation of Joint Rheumatism. The apparently proven variants of this disease in children, as set forth by Cheadle, are hardly less interesting than its possible association with several obscure and rebellious conditions in middle and advanced life.

Many efforts have been made to determine the exact nature of the poison and its point of entrance into the system by those who believe that it is a true infection. In the *Archives Générales de Médecine*, for August, there is an able essay upon the subject by Dr. Leredde, which deserves attention.

He shows that, although the disease agent has not been discovered, arthritic rheumatism presents the test-marks of the infections, namely: it begins frequently by sore throat; it has as complications (or rather symptoms) endopericarditis, albuminuria and pleurisy; its joint-liquid is rich in white corpuscles; it has leucocytosis and increase of blood-fibrin (like a pneumococcus infection); its fever is almost constant and even when without complications there exists a state of prostration as intense as in the severest ulcerations of the bowels.

Infections of the joints are in general persistent infections of the blood (before they attack the joints). This is evident in pus-infections, tubercular and syphilitic arthritic diseases. Apart from infection of the blood, similarity of structure would not explain the involvement of many distant joints. The focus of the infection of the blood-stream may be the marrow of the bones, the role of this tissue in infections being now suspected, as it is not infrequently like the spleen a nesting-place of infectious organisms. Or the focus of infection which causes the joint effusion may be nearer at hand in the tissues underlying the serous membrane, as in pleuritis and peritonitis. The frequent relapses and shiftings of symptoms could be explained by supposing repeated pourings of poison into the blood by saprophytic organisms.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending November 14, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		24
Phthisis Pulmonalis.....		20
Measles.....		
Whooping Cough.....	1	
Pseudo-membranous Croup and Diphtheria. }	26	8
Mumps.....	3	
Scarlet fever.....	22	1
Varioloid.....		
Varicella.....	1	1
Typhoid fever.....	8	5

Most of the large hospitals of Baltimore have purchased the Edison X-ray machine.

The Richmond Board of Health is without money until the end of the year and the city's health and safety is menaced.

The recent report that Dr. Howard A. Kelly of the Johns Hopkins Hospital has been ordered a year's rest from all work is denied by that hospital.

Dr. Henry M. Patterson, a prominent physician of Staunton, Virginia, died at his home on November 9, aged 64. He was a graduate of the University of Virginia in 1851.

Dr. John Turner, a retired physician of Prince Fredericktown, Md., died at his home last week, aged 85 years. He was graduated from the University of Maryland in 1834.

The *Medical Record* states that a Vienna physician was upheld by the courts in refusing to pay a bill on the plea that the practice of medicine is a privileged profession and not a trade and that a physician's property cannot be seized for the payment of his debts.

The Association of German Natrualists and Medical Men which met at Frankfort, Germany, in September, will meet next year at Brunswick, with Professor Lang of Heidelberg as President and Professor Waldeyer of Berlin as Vice-President.

Dr. George H. Rohé, superintendent of the Second Insane Asylum at Springfield, has made a very satisfactory report of work done

since July 6, 1896, when the first patients were admitted.

Dr. John S. Fulton, Secretary of the State Board of Health, has issued an important circular to the school teachers of Maryland warning them against diphtheria and giving them advice as to the prevention of contagion.

Dr. Thomas A. Councell, health officer of Talbot County, has been compelled to come out with a decided statement as to the existence of diphtheria in his county. The local papers and the citizens denied the existence of the disease and made other foolish statements.

The Southern Surgical and Gynecological Association at its recent meeting at Nashville elected the following officers: President, Dr. George Ben Johnson, Richmond, Va.; Vice-Presidents, Dr. F. M. McRae, Atlanta, and Dr. W. E. Parker, New Orleans; Chairman Committee of Arrangements, Dr. H. H. Mudd, St. Louis. The next meeting will be held in St. Louis.

The Washington County Medical Association has elected Dr. Abraham Shank of Clear Spring, President; Dr. H. S. Herman of Hagerstown and Dr. H. C. Foster of Clear Spring, Vice-Presidents; Dr. C. R. Scheller of Hagerstown, Treasurer; Dr. C. L. G. Anderson of Smithsburg, Recording Secretary; and Dr. C. D. Baker of Rohrersville, Corresponding Secretary.

The Section on Orthopedic Surgery, Dr. Newton M. Schaffer, Chairman, of the New York Academy of Medicine, met last night. Dr. James K. Young of Philadelphia read, by invitation, a paper on "The Treatment of Lateral Curvature by Light Gymnastic Movements." Among those who took part in the discussion were Drs. Augustus Thorndike, John Dane and E. H. Bradford, Boston; De Forrest Willard and H. Augustus Wilson, Philadelphia; Robert Tunstall Taylor, Baltimore; Wm. E. Wirt, Cleveland; L. A. Sayre, J. D. Bryant, V. P. Gibney, Jacob Teschner, H. L. Taylor, S. Ketch, T. H. Myers, W. R. Townsend, R. Whitman, L. W. Hubbard, H. W. Berg, R. H. Sayre and A. B. Judson. Dr. Schaffer gave a dinner to the visitors and members of the section at the University Club before the meeting. Dr. Robert Tunstall Taylor, who took part in the discussion, is Chief Surgeon of the Hospital for Crippled Children, of Baltimore.

Book Reviews.

A MANUAL OF CLINICAL DIAGNOSIS BY MICROSCOPICAL AND CHEMICAL METHODS. For Students, Hospital Physicians and Practitioners. By Charles E. Simon, M. D., Late Assistant Resident Physician Johns Hopkins Hospital, Baltimore. In one very handsome octavo volume of 504 pages, with 132 engravings and 10 full-page colored plates. Cloth, \$3.50. Lea Brothers & Co., Philadelphia and New York, 1896.

Nothing but praise can be given to such a fine work. It contains chapters on the blood, mouth secretions, gastric contents, feces, sputum, urine, etc. The best is that on the urine. Figure 3, Plate II, of the stained leucocytes is badly colored. Figure 2, Plate VII, of the pneumonia organism is very poor and diagrammatic. The author has no faith in physiological or cyclic albuminuria and thinks the presence of albumen always serious. Plate VIII, showing the layer test for albumen, is well done. He suggests putting the urine in a conical glass and then allowing the acid to escape from a pipette which has been carried to the bottom of the vessel. This is not easy to carry out. The author believes in physiological glycosuria. In describing the phenylhydrazin test, evidently translated from Jaksch, the expression, "two-points-of-a-knife-ful," is too German; "two pinches" might be better. He does not give Heller's test for sugar. He does not believe that constipation also causes increased indicanuria, thus disagreeing with Jaksch, Uitzmann and others. Plate X, showing the diazo-reaction, is well executed. In examining the sediment the centrifugal is only casually mentioned. He advocates the microscopical examination of the sediment without a cover-glass and advises against using a high power. Figure 122, of the gonococcus, is overstained and not distinct. Without doubt, this is the best work of its kind in English, even excelling the translation of Jaksch, which it much resembles in places, and is a great credit to the author's hard study and rich experience. In his spelling he omits the final "al" in such words as "physiological," but still clings to the "æ" and "œ" diphthongs and the final "e" in such words as "ptomaine." On page 215 he spells "sanguineous," "sanguinous," and on page 412 "ptomaines" is spelt "ptoamins." Throughout the book "Pettenkofer" is written "Pettenkoffer."

Current Editorial Comment.

BICYCLES AND IMMORALITY.

Medical Record.

THE question of the healthfulness of cycling, for men as well as for women, is one that still admits of discussion; but the man who can assert or even suggest that the thousands, perhaps millions, of women throughout the world, who ride the wheel, are giving themselves over to self-abuse, puts himself beyond the reach of argument.

THE PHYSICIAN'S PERSONALITY.

Medical Council.

IT is too often the case that physicians rely entirely upon their scientific ability to bring them success in their practice. Experience demonstrates this to be quite a serious mistake. Much of his success, not only in attracting patients, but also in curing them, depends upon the physician as a man, aside from his scientific attainments.

MUSHROOM POISONING.

New York Medical Journal.

THE frequency with which fatal cases of mushroom poisoning are reported at the time of the year mentioned, that of the early rains and the first mushrooms, shows how cautious one should be in the tentative consumption of fungi that grow wild in the meadows and woods; persons who imprudently trust themselves to select edible mushrooms, relying on their instinct in the absence of scientific information, expose themselves to terrible dangers.

THE MODERN NURSE.

Baltimore American.

A GRAVE difficulty has arisen in the progress made in the experiment of trained nurses. The old Sairy Gamp's type has almost disappeared from the face of the earth, but in the gentle, refined and intelligent women now entering the profession, science finds one great drawback to its work. In a nurse this combination of qualities enhances her aid to science, but it is also wreaking havoc in the susceptible hearts of eligible patients. No sooner is a star of the hospital at the zenith of her usefulness, than all her glowing promise is blasted by the chill frost of matrimony. Love matches between patient and nurse are now so frequently reported that science is forced to realize with all its power it is helpless in the hands of the little blind boy.

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

DECEMBER						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

State Societies.

NOVEMBER.

27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary. Troy.

DECEMBER.

1. LYCOMING COUNTY (PA.), at Westport, Pa.
3. TRI-STATE, of Western Maryland, Western Pennsylvania and West Virginia, at Cumberland, Md.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary. Birmingham, Ala.
16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary. Kansas City, Mo.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 2d Friday and 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BESEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PHARMACEUTICAL.

SENG, through its secret action, encourages the flow of nature's own pepsin when taken into the stomach, and thus does not dissolve the food *per se*. The physiological difference between the pepsin and Seng treatment is that the former is an artificial treatment, and a makeshift at best, whilst the latter is a restorer of the natural functions of digestion.

INFLAMMATORY DIARRHEA.—In the insidious beginning of the disorder, when large, pasty stools are being passed, the child, if an infant, should be fed with weak veal broth and barley water in equal proportions; whey with cream; the yolk of one egg beaten up with broth or whey, and Mellin's Food mixed with whey or barley water. The meals should be frequently varied during the day and the quantity allowed must be strictly proportioned to the infant's powers of digestion. For medicine he may take a powder of rhubarb (gr. ij-ijj) and aromatic chalk (gr. iij-v) every night for three nights; and in the day, a mixture composed of half a drop of laudanum with four or five grains of the bicarbonate of soda in some aromatic water.—From "Disease in Children," EUSTACE SMITH, M. D.

MARYLAND MEDICAL JOURNAL

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Original Articles.

THE PRACTICAL USE OF SKIASCOPY.

By H. O. Reik M. D.,

Assistant Surgeon Baltimore Eye, Ear and Throat Charity Hospital, and Assistant in Ophthalmology and Otology at the Johns Hopkins Hospital.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

I DESIRE to call the attention of the society to this aspect of the subject because I fear we have been too much inclined in the past to treat it as of scientific and theoretical value rather than of practical service. It is not surprising that this is so, for most of our text-books have spoken of the method very briefly and given such poor explanations of its use that if one simply followed their directions, discouraging results were apt to be the issue.

Within a comparatively recent time, however, careful attention has been given to the principles involved in the test, and the essential details of its use so developed, that anyone who is willing to give it close attention for a short while can easily become the master of it and to do this is to become an earnest advocate of its use.

Dr. Edward Jackson of Philadelphia has perhaps done more than anyone else to make this method of examination a perfect one, and to succeed with it, it is only necessary to follow strictly the directions laid down in his monograph "Skiascopy," which was published last year. The points that Dr. Jackson lays particular stress upon are, the use of a perfect mirror with small sight hole,

a small point of light and an otherwise darkened room.

I have here a chimney, devised by Dr. Thorington, which secures control of the light very nicely. It is, however, more elaborate than necessary. With this over an ordinary Argand gas burner no light escapes to interfere with the examination, and by revolving the disk either a small or large point of light, as desired, may be obtained. A small point of light falling directly upon the mirror gives the best source of illumination for accurate work. The mirror may be either plane or concave, but should be a perfect one with a small opening, the edges of which give forth no reflections.

That skiascopy is in all respects the best of the several objective tests for refraction is, I think, beyond question, and for a comparison of the different methods and a summing up of their respective values, I would refer you to the report of the special committee on this subject, which was made at the 1894 meeting of the American Medical Association, and which is to be found in the *Journal of the American Medical Association*, Vol. xxiii, pages 337 to 342.

This committee reported in favor of

the use of ophthalmoscopy, ophthalmometry and skiascopy in all cases, but said of skiascopy, "It is, on the whole, the most accurate and reliable objective method of estimating ametropia. It measures the total refraction of the eye, whether this be static refraction or the refraction by accommodation. Applied in the direction of the macula, it measures in the visual zone exactly the refraction that is measured by the subjective method. . . . For eyes having a distinct and sufficiently extended visual zone, it is accurate to within one-eighth of 1 D."

These claims for accuracy are made by men who have used the method a long time, and who are all careful observers. I have frequently been able to decide between astigmatic glasses differing only one-eighth of 1 D., and astigmatism of one quarter diopter is very readily determined. Such exactness can hardly be claimed for any other method of examination.

One of the most difficult points I had to contend with, before I began to use this method, was the determining of the exact axis of my correcting cylinder lens, in astigmatism. With the use of test letters intelligent persons will often give hesitating replies when asked to decide which gives them the best vision, the glass with its axis held at 75° or at 90°, or even when greater variations than 15° are made; or, what is perhaps worse, the patient will give conflicting statements at different sittings, or at different moments during the same sitting, although you know they are making an honest effort to decide rightly. In such cases I have derived the greatest help from skiascopy.

The meridian of astigmatism and the axis at which the correcting cylinder should be placed can be determined so exactly as to leave no doubt in the examiner's mind. This is done promptly

and without any assistance from the patient.

Again, it is often difficult to say whether it is best to make a spherical glass an eighth or quarter diopter stronger and the cylinder as much weaker, or, *vice versa*, for the patient reads equally as well with the one combination as with the other and the astigmatic lines give you little or no help. I question whether we are doing right to ask or permit the patient to decide such points in most cases. But few of our patients are capable of appreciating such fine distinctions and the majority are more than liable to make the wrong selections.

By this method the responsibility of a decision is made to rest where it belongs, upon the physician, and he should certainly be willing to accept it, for the blame of an ill-fitting glass will sooner or later fall upon him. In difficult cases aid of the axinometer may be called into use and then it is only in rare cases that the examiner will hesitate in deciding the exact meridian of astigmatism.

I have said nothing about the special advantage of this method in examining children, nervous individuals and illiterates, partly because such advantages are so palpable and partly because I advocate the use of the method in all cases where ametropia is suspected. As to the amount of time consumed, I think it will be found that while perhaps more time is necessary to the first examination, a smaller number of visits on the whole will have been made. This is of particular importance in our hospital work, and I am sure that the saving of time there is very considerable.

In conclusion, the ease with which this method may be applied and the certainty of the results obtained make it applicable to every case of refraction and I would strongly recommend its use as a part of our routine practice.

HYSTERICAL ACHILLODYNIA. — Dr. C. Féré speaks in the *International Medical Magazine* of the pain in the tendon of Achilles during extension or under pressure on the side of the body in which the hysterical stigmata predomi-

nate. It is associated with swelling of the part and persists after the other hysterical symptoms have disappeared. Albert has described such a pain in the tendon of Achilles, which disappears when the patient is lying down.

TREATMENT OF LARYNGEAL DIPHTHERIA.

By Edward Anderson, M. D.,
Rockville, Md.

I HAVE no doubt that many diseases, diphtheria among the number, are arrested the moment the system is brought under the influence of mercury. The only question is, which is worse, the remedy or the disease; and I think very few physicians would hesitate to decide in favor of the remedy in a malady so fatal as the one under consideration.

I lost every case of laryngeal diphtheria that I treated up to November, 1890. At that time a four year old child was stricken with this disease in my town and the attending physician pronounced it membranous croup. He did not tell the parents there was any danger of contagion, consequently a child five years old contracted it.

The four year old child succumbed in a few days, when I was placed in charge of the one five years old. I determined to save him no matter how extreme the remedy, and gave him five grains of calomel to begin with and after that one grain of calomel, with half a grain of ipecac, every two hours, until the child began to vomit, when I left off the ipecac, but kept on with the calomel.

Whenever the bowels became too lax, I added half a grain of Dover's powder to the dose. This treatment was kept up for a week. The child would undoubtedly have died before getting under the influence of the mercury, but for the inhalation of steam, which caused him so much relief that he would of his own accord use it.

The method I employed was a very simple one. It consisted of a coal oil stove which, after the water was once boiled, kept the steam constantly escaping and was conveyed to the little patient's throat by means of a long paper tube attached to the spout of a kettle.

A month later, the two year old child contracted the disease in the same form, through the carelessness of the mother,

who had been warned of the danger; it being too young to inhale the steam properly, it died.

There are only two certain ways of affecting the system with mercury, particularly that of a child. One is by inunction, the other by fumigation. Inunction is too slow a process to be used in a case of diphtheria, but fumigation affects the system, almost immediately, brings the mercury in contact with the disease at its starting point, relieves difficult breathing at once and in my opinion should be employed in every case of laryngeal diphtheria from its inception.

As I have been obliged to draw on my own imagination as to the proper means of fumigating, having never seen a description of the process used by others, I devised the following plan. I place the patient in a low cradle covered with blankets thick enough to prevent the escape of smoke and large enough to lie on the floor all around it. Under the cradle I place an inverted baking pan, on the top of which I put an iron plate at least a fourth of an inch thick, heated until nearly red hot. On that I pour a level teaspoonful of calomel, and keep the child under the canopy for ten minutes at a time. Six fumigations at intervals of four hours I think would be enough in any case. This treatment should be inaugurated as soon as the larynx is known to be invaded.

On October 27, 1895, I was called to see a child dying from diphtheria and in spite of all I could do it died in three hours. There was another child one year old in a cradle in the same room. The breathing was so difficult that I would not have been surprised at its death at any moment. I gave it two grains of calomel and ordered half a grain to be given every two hours until my return.

The next morning, finding it no better, I began with fumigation and kept

it up until it had been used four times, continuing the internal treatment. On the third day, its improvement was so great that I considered its recovery almost certain and in about a week it was well enough for me to cease my visits.

On the 18th of October of this year, a woman came to my office at night saying that her five year old boy was very sick with croup. She was particularly uneasy, as a few days previously, a little boy of five years of age had died in this town with what the physician termed membranous croup and after intubation had been performed, I ordered five grains of calomel to be given that night and told the woman I would see the child next morning.

On visiting the boy in the morning, I found false membrane back of the tonsils and the larynx very much clogged. As the child's bowels had not been moved, I ordered two grains of calomel and half a grain of ipecac to be given every two hours during that day, the 19th. On the third day of the patient's illness, October 20, the bowels having moved and vomiting having occurred several times, I reduced the calomel to one grain and the ipecac to a quarter of a grain every two hours. I gave seven and a half grains of salicylate of sodium

three times daily in a teaspoonful of essence of peppermint during these two days also.

After this nothing in the way of medicine was given except two drops of the fluid extract of digitalis, given by the mouth, equal to fourteen drops of the tincture, and a sixtieth of a grain of strychnia hypodermically during the remaining period of his illness. I fumigated this patient four times on the 20th and once on the 21st. During the night of the 20th, the mother put calomel on the red hot stove and fumigated the whole family.

On the 20th, Dr. J. R. Wellington of Washington, D. C., in response to my request, came up and inserted an O'Dwyer tube, which the child coughed out on the 26th. The child was unable to swallow and would have died had I not also employed the nasal tube for the purpose of feeding him and administering whiskey and medicine. The child is now, on November 2, out of danger, but is still very weak. When I first saw him, I told the father the case was most desperate and would most likely prove fatal, but I will now feel more hopeful in the future, as it is the third patient that has recovered where I have had entire control of the case.

BOWEL OBSTRUCTION BY A GALL-STONE, SIMULATING APPENDICITIS.

By J. H. Hardcastle, M. D.,
Cecilton, Md.

READ BY TITLE AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

PATIENT, male, aged 56, weight 210 pounds, had at times for the past three or four years suffered with slight pains in the region of the transverse colon and both iliac fossae, accompanied by annoying forebodings. A peculiar striking sound as if water, drop by drop, was falling into a bottle, and again like a little stream passing with a gurgling sound, was noticed by the patient.

On the night of July 1 he was seized with sudden pain, accompanied with

vomiting of a green, sweetish fluid (lettuce had been eaten the day previous) which soon changed to a brown color; there were also two or three small semi-solid evacuations from the bowels; then there was a cessation of pain and vomiting for several hours, when it returned with increasing severity.

Stercoraceous vomiting occurred on the fourth and fifth days, with great prostration.

On the afternoon of the fifth day, after

the three physicians engaged on the case had decided that an operation would have to be done for what was supposed to be appendicitis, there was a sudden cessation of pain and vomiting and the patient made an uninterrupted recovery. (In obscure cases of intestinal and hepatic diseases one cannot be too guarded in trying to arrive at a correct diagnosis.)

On the 15th the stone passed *per rectum*, and proved to be a large cholesterolin (crystallized) nearly two inches long and one in diameter; there was also passed

for several days a number of small yellow, seed-like bodies which appeared to contain cholesterolin in a soft, waxy state. It is highly probable that this calculus was formed in the intestines, as there had been no hepatic symptoms to account for it.

The treatment consisted of calomel and soda, copious enemata of warm water (through the long rectal tube), morphia and atropia, hypodermically, large doses of olive oil (the California is the best) and also the phosphate of sodium.

PERNICIOUS ANEMIA WITH DISTENTION OF THE LARGE INTESTINE.—Stockman (*University Medical Magazine*) reports the case of a woman delivered of a healthy child in November, 1895, after a normal labor, during which she lost less than the usual quantity of blood. She was always well until two months prior to her *accouchement*, when she began to grow weak and pallid and to be greatly troubled with flatulent distention of the abdomen. These conditions increased in severity, and the patient became much emaciated. Physical examination of the heart, lungs, liver and spleen was negative. The abdomen was much distended, and the peristaltic movements of the bowel very active. From the presence of contracting bands there was little difficulty in recognizing the large intestine. Hemoglobin, 24 per cent.; erythrocytes, 1,680,000; later, hemoglobin, 20 per cent.; erythrocytes, 920,000. Treatment consisted of iron, arsenic, and careful dieting. The patient died February 28, 1896. There were found at the necropsy dilatation of the stomach and enormous distention of the ascending and descending colon. The transverse colon and rectum were normal. No obstruction. The ante-mortem suspicion that the excessive anemia was due to malignant obstruction of the large intestine was not borne out by the autopsy. Although the clinical symptoms were those of pernicious anemia, there were no excess of iron in the liver or spleen. The history shows that the distention of the bowel

was distinctly traceable to the excessive flatulence from which the patient suffered during her pregnancy.

* * *

HEMORRHAGE FROM BONE ARRESTED BY NAILS.—Rabin (*British Medical Journal*) mentions the difficulty of arresting hemorrhage from an artery situated in bony tissues, especially if spongy. Ignipuncture or prolonged pressure have been the best means up till now, but the author has devised another method. He nails the vessels with cobbler's nails previously disinfected. At the end of the operation they are removed, but if any vessel bleeds again the nail can be left in. This device has proved very serviceable during Kraske's operation, six nails being sufficient to arrest the hemorrhage from the divided sacrum.

* * *

THE HEART UNDER RÖNTGEN ILLUMINATION.—Dr. Benedict (*New York Medical Journal*) finds by X ray illumination that the apex approaches the base of the heart in systole, so that there is no apex impulse in Skoda's sense, but at most a lateral systolic apical stroke. The ventricles are not entirely emptied at each systole, but always retain a considerable amount of blood; nevertheless, the four thousand heart-beats to the hour carry fresh blood enough into the arteries. On deep inspiration, the normal heart rises from the diaphragm, so that an appreciable interval is visible between them. Such examinations are most satisfactory if made on young and thin persons.

Society Reports.

BALTIMORE MEDICAL ASSOCIATION.

MEETING HELD OCTOBER 12, 1896.

THE President, Dr. Randolph Winslow, in the chair.

Dr. Eugene Lee Crutchfield read a paper entitled A NARROW ESCAPE FROM DEATH DURING CHLOROFORM NARCOSIS. (See page 100.)

Dr. H. H. Biedler agreed with him as to the importance of not losing presence of mind. He gives chloroform very frequently but rarely gives ether. The danger arises from the administrator watching the operation; also from the administrator not giving sufficient air. He lays no stress on idiosyncrasy. Do not push the anesthetic when the respiration ceases or the pulse grows weak. Be guarded in giving an anesthetic to patients with kidney trouble. It is said that chloroform is contraindicated in albuminuria and that then ether should be used, but he thinks that one is as bad as the other.

Dr. Charles H. Jones agreed with Dr. Biedler that the unpleasant effects of chloroform are due to the administrator. He uses it very frequently but has had no ill consequence. He withdraws the chloroform when there is any stertorous respiration. He admits plenty of oxygen. He is a great advocate for chloroform.

Dr. John Neff endorsed Dr. Jones' statements. He has seen no deaths from chloroform, but several alarming cases. He has reported one case of this nature in which the patient was revived by the application of hot water to the chest. In obstetrical practice he often changes from chloroform to ether when he thinks that the indications call for this change. He gives a tablet of nitroglycerine and strychnia before the administration of an anesthetic.

Dr. W. F. A. Kemp related a case in which there was no primary ill effect from chloroform, but a peculiar after-effect. The operation was performed in the morning, but about 10 P. M. the patient had a well marked case of angina pectoris.

Dr. E. G. Waters spoke of the Esmarch apparatus for giving chloroform. The administration of the anesthetic with this seemed to be continuous. This contrivance is admirable for the dilution of the chloroform vapor. His observations correspond with those of Dr. Jones. He has had no unpleasant effects. The nearest approach to an accident was from ether. He asked if anyone present had used bichloride of methyl. This is used largely by Sir Spencer Wells, who has had no threatening accident. It is also free from the nausea and other unpleasant effects of chloroform and ether.

Dr. C. Hampson Jones: The experience of different men varies widely on this subject. Sometimes with the utmost caution a death will occur. He has seen four deaths from chloroform. In three of these the death occurred in the early stage of the administration. Death will sometimes occur without any fault of the chloroform or of the administrator, but be due to the patient, and the necropsy will reveal no pathological change. Do not do too much in attempting to resuscitate the patient. When artificial respiration is employed, twelve times a minute will prove sufficient. Chloroform is preferable to ether.

Dr. T. Chew Worthington: Accidents will occur no matter how careful the administrator may be. He has seen one case of this kind when the administrator could not be blamed.

Dr. Biedler: Bromide of ethyl is an excellent anesthetic for short operations.

Dr. C. Hampson Jones is not acquainted with bichloride of methyl, but it seems to be similar to the A. C. E. mixture.

Dr. Randolph Winslow: A patient under an anesthetic, no matter what it may be, is very near being a dead person. We must consider the patient in the choice of an anesthetic. One with bad kidneys must not take ether, one with bad lungs must not take ether, and the very young and the very old should have chloroform. He has recently seen one death from chloroform. A person dead from anesthesia is dead from the beginning. Nitrite of amyl is an efficient agent to resuscitate patients.

In the case of death which he saw, the post-mortem revealed fatty heart, fatty liver and fatty kidneys. The treatment depends upon whether the cardiac or the respiratory centers are involved. Sooner or later every physician will have bad results if he continues to use anesthetics. In obstetrics chloroform is practically a safe anesthetic. In private practice he uses the Esmarch inhaler altogether. He mentioned the case of a very narrow escape from death that he witnessed some years ago. Ether kills later on, but not so frequently on the spot as chloroform.

Dr. Waters: The title of the drug that he mentioned explains its nature. It is a chemical and not a mechanical union. The air that we breathe is a mechanical mixture. Water is a chemical compound. In puerperal eclampsia where the kidneys are involved, chloroform is a favorite remedy.

Dr. E. L. Crutchfield, in closing the discussion, refuted the insinuation that in the case reported by him the accident was due to the administrator not watching the patient or not giving proper attention to his duty. He was giving (as is his invariable habit in such cases) his undivided attention to the administration of the anesthetic. He was also careful to let the patient have plenty of atmospheric air and not to give him too much chloroform. He prefers a towel folded in the shape of a cone and open at both ends to any other apparatus, as it allows the patient to inhale sufficient oxygen and does not collect the secretions from the mouth and the throat. He prefers chloroform to ether, but once when the heart was extremely weak he changed to the latter drug with good result. In the case reported by him tonight artificial respiration was employed about sixteen times per minute. The action of nitrite of amyl (recommended by *Dr. Winslow*) is identical with that of nitro-glycerine except that it is more prompt. Accidents may occur in the hands of the most careful. The case of death (mentioned in his paper), which *Dr. Whitehead* saw, happened in the hands of his fellow-student, *Mr. Priestly Smith*, now the well-known English oc-

ulist, then dresser to *Mr. Sampson Gamgee*. Everything was done to resuscitate the patient, but without avail.

Dr. Winslow exhibited a tumor removed today from the pelvis. There were no attachments except some flimsy ones to the omentum and to the pelvis. It was a dermoid tumor of the left ovary. The symptoms were obscure and had nothing to do with the tumor.

Dr. Waters asked if it is common to find calcification in ovarian tumors.

Dr. Winslow thought not.

The Association then adjourned.

EUGENE LEE CRUTCHFIELD, M. D.,
Recording and Reporting Secretary.

Medical Progress.

REPORT OF PROGRESS IN DISEASES OF THE EYE.

By Hiram Woods, Jr., M. D.,
Clinical Professor of Eye and Ear Diseases, University of Maryland; Surgeon at the Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore.

DISTURBED EQUILIBRIUM OF THE EYE MUS- CLES A CAUSE OF HEADACHES AND OTHER REFLEX NEUROSES.

IN the *Chicago Medical Recorder* of April, 1896, *Dr. F. C. Hotz* discusses this vexed and not entirely new question. His paper is an enquiry into the etiological relation between imbalance of the eye muscles and certain neurotic symptoms. This relation has been asserted by some and vigorously denied by others. *Dr. Hotz* is an observer of reliability and his views are of importance. He says in part:

"If this was a subject of interest to oculists only, we might well leave it to the forum of the ophthalmological societies just as we leave to them the discussion of the technical details of the examination and treatment of these muscular anomalies. But the main question, I think, is of great interest to every physician; for as these neurotic affections occur in the practice of every physician he certainly must take a great interest in observations by which it is claimed an important source of these neuroses has been discovered. If this etiological

relation between the eye muscles and neuroses really exists, the physician wants to know it, so that he may conscientiously advise the examination of the eyes in those cases which have resisted all his therapeutic efforts and in which he has found no tangible cause of the neurosis. But if that etiological relation exists only in the imagination of some misguided oculists the physician wants to know that too in order to save himself the embarrassment of sending his patients to an oculist, only to be told that to cure neuroses through the eye is an illusion or a deception.

"Whenever the disturbance of the muscular balance is so great as to produce an actual, visible strabismus the eyes never attempt to restore binocular fixation by special muscular efforts and, therefore, we never observe any nervous symptoms in these cases. But whenever there exists only a tendency to deviation, it is ordinarily opposed by muscular tensions, because thereby binocular vision can be maintained. For instance, suppose my right eye had a tendency to diverge, it would always turn its visual line away a little from the object I am looking at and, therefore, would not receive the image of the object upon its macula like the left eye. The images not being received on identical points of the retina a very confusing sort of double vision would be the result. To get rid of this confusion it is only necessary that the internal rectus of my right eye, by a slight contraction, opposes the diverging tendency and holds its visual line directed to the fixation object. But as it would have to keep up this struggle against the diverging tendency from early morning until late at night this internal rectus, sooner or later, would become overworked and I should experience the effects of this continuous muscular strain upon the nervous system just as the overworked ciliary muscle of hypermetropic eyes causes eye pain, headaches and other neurotic symptoms.

"In all the text-books on ophthalmology you find a chapter on muscular asthenopia, telling you how the strained effort of the interni in maintaining bin-

ocular vision in reading causes headache, nausea, faintness and other nervous symptoms; but the most text-books are silent as to similar effects being produced by similar strained efforts of the other ocular muscles. Now if we concede it to one muscle why not to the others?

"The same illogical reasoning is shown in another argument. All oculists are agreed that the strained efforts of the ciliary muscle are a prominent factor in the etiology of nervous disorders; I dare say there is at the present time not one oculist denying the possibility of relieving a great many nervous complaints by glasses correcting the refractive errors of these sufferers, although a great many people suffer no ill-effects from their uncorrected refractive errors. Now if we admit that this intraocular muscle can exert such far-reaching influence upon the nervous system, it seems very irrational to disbelieve the clinical evidence that the extraocular muscles exert a similar disturbing influence whenever a similar continuous and excessive work is demanded of them. I grant a perfect muscular balance is seldom found and still many people with abnormal balance enjoy perfect health and comfortable vision, but this proves nothing; for as I said before, many, very many, ametropes experience no discomfort from their abnormal refraction and nevertheless we regard the etiological relation of ciliary muscle strain to many reflex neuroses as an established fact."

The author then mentions the well-known fact that after an imbalance has been corrected the general health—in many cases previously impaired—improves. From this has sprung the conviction with some that improvement in neurotic symptoms is due not to correction of eye defect, but to an improved general health. Dr. Hotz presents cases justifying him in thus replying:

"Everything that medical skill can do to improve their health had been tried in vain; every organ of the body except the eyes had been carefully examined in the search for the cause of the nervous debility. All these efforts having

been fruitless, the sufferer is referred to the oculist who, upon a careful scrutiny of all evidence, recognizing in the heterophoria present the probable cause of all the local and general disturbances of the patient's nervous system, restores by his treatment the proper balance of the ocular muscles and, presto, there is a great change in the clinical aspect of the case; eye pains are gone, headaches do not return and the patient is growing stronger, bodily and mentally, every day. The general improvement follows the relief of the neurotic symptoms and these symptoms subside after the treatment of the heterophoria. Keep this order of the events clearly before your mind and you will find the correct answer to the question whether or not we are warranted to attribute the patient's recovery to the treatment of his ocular muscles.

"Dr. Roosa does not believe in heterophoria as a cause of reflex neurosis and gives in his text-book, page 530, the following singular explanation of the reported cures: 'Time and added experience have deepened my conviction that the cures accomplished in such cases were mainly suggestive and many of them illusionary, occurring in neurotics who came into the world with an abnormal nervous system and in whom symptoms are as variable as the changing winds.'"

This "suggestive" explanation Dr. Hotz meets by narrating a case—a draughtsman of 23—who had consulted three oculists for headaches, always aggravated by work. Everything had been done except to correct the muscular anomaly thoroughly. This accomplished, relief came permanently. He adds:

"Now, if this was a cure by suggestion, as Dr. Roosa would have it, why did suggestion not work with the other three oculists? All four oculists employed the same means, glasses, for suggestive treatment, and if the patient was susceptible to suggestion why did it fail in the hands of my colleagues? You cannot relieve this eye pain and headache by mental jugglery; you cannot make a patient believe the glasses will cure

his trouble unless they actually relieve the muscular pain which has caused the discomfort; for eyes are very quick to tell whether or not the glasses are correct.

"I cannot emphasize strongly enough the importance of exercising the greatest caution and patience in the examination and treatment of these muscular defects. I am fully convinced many negative results in the treatment of these cases would be turned into positive success if the surgeon had spent more time in carefully studying his cases. He who imagines he can understand and treat these cases after one examination will never make a success of it. The correct and successful fitting of glasses for refractive errors is mere child's play in comparison with the correct working out of a case of muscular errors. This is a problem full of perplexities requiring the highest degree of skill and judgment for a successful solution.

"To one familiar with the many pitfalls in the investigation of these cases it is not surprising to hear of so many negative results. No one has accomplished a cure in every case, and I am frank to confess to a number of failures; but in the face of so many authenticated reports of successful cures, these negative results cannot be used as an argument against the doctrine of heterophoria being an important factor in the causation of neurotic conditions. These negative results only prove we have not yet arrived at that perfect state of knowledge which precludes the commission of errors."

* * *

SENILE ENDOMETRITIS AND VAGINITIS.—Dr. Augustin H. Goelet, Professor of Gynecology in the New York School of Clinical Medicine, presented a paper on this subject at the October meeting of the New York Medico-Surgical Society (*Medical Record*). He thinks if the general practitioner will consider that women past the menopause may be liable to chronic inflammation of the endometrium and will look for symptoms denoting it he will find that it is by no means infrequent and that many obscure

troubles in women at this age will be cleared up and their sufferings relieved.

The atrophic changes which occur at this time and which are due to a diminished pelvic circulation and impaired local nutrition are directly responsible for this condition. He agrees with Skene that this process in many cases is a degeneration rather than an inflammation. During the first year or two after the menopause, however, it undoubtedly exists as a chronic inflammation, but contraction and narrowing of the canal of the cervix causes retention of the secretion, which becomes acrid and destroys the mucous membrane.

The general malnutrition which accompanies this condition is regarded more as a result than a cause of the disease, and disappears upon the establishment of drainage and improvement of the local condition. The disease is characterized by a purulent or mucopurulent discharge which is at times very acrid and irritates the vagina and vulva. The rugae are effaced and the surface of the vagina is smooth and glistening in places, with here and there minute ecchymosed papillae.

The same method of treatment which would be applicable for endometritis in younger women would not be suitable in this condition. It is true that drainage and absolute cleanliness of the uterine cavity are essential, but this cannot be accomplished by dilatation in the usual manner with curettage. The mucous membrane in advanced cases is already destroyed and the closure of the canal of the cervix from bands of cicatricial tissue would make ordinary dilatation dangerous since rupture would result.

The author points out that this may be accomplished safely by means of conical electrodes employed with the negative pole of the galvanic current and cautions that only a moderate strength should be employed and cauterization should be avoided. When dilatation has been thus accomplished a special small double current irrigator is inserted and the cavity is washed with a weak (1 per cent.) solution of lysol. This irrigator can be utilized as an electrode and the current turned on while the ir-

rigation is going on, thus producing a moderate stimulation of the endometrium. The surface of the vagina and vulva is then dusted with a bland non-irritating antiseptic powder, markasol, and a solution of the same is used as a vaginal douche once or twice a day as required. For vesical tenesmus the urethra is dilated with the same electrodes and the bladder is washed out with a 1 per cent. solution of markasol. The same solution is used for the rectum.

Cicatricial contraction of the vagina in advanced cases may prevent the use of a pessary to correct a misplacement if this complicates the case. In these cases, as well as where the organ is prolapsed, the author would prefer ventral suspension to hysterectomy.

Senile endometritis is usually regarded as most intractable and is trying for both physician and patient. Yet the author says he knows of no gynecological disorder the treatment of which is undertaken with more certainty of success.

* *

INSOMNIA AND GASTRO-INTESTINAL DISEASE.—Dr. Boardman Reed of Atlantic City, N. J., in a paper read before the section on Practice of Medicine of the American Medical Association, May, 1896, entitled, "The Frequent Dependence of Insomnia, Mental Depression and Other Neurasthenic Symptoms upon Disease of the Gastro-Intestinal Tract," pointed out that the symptoms named result admittedly from the graver forms of disease of the alimentary canal, such as cancer, ulcer, gastric catarrh, dilatation, etc., in consequence of the lowered nutrition which these affections induce, from a starvation of the nerve centers through impoverishment of the blood, or from a poisoning primarily of the blood and secondarily of all the tissues by the products of fermentation, putrefaction and suboxidation.

He showed that while cancer and ulcer of the stomach are generally recognized at a comparatively early stage, on account of the pain and vomiting which characterize them, gastric catarrh, gastric atony, dilatation of the stomach, are more often allowed to progress to an

advanced and comparatively hopeless stage before properly diagnosed and placed under appropriate treatment. Hyperacidity, or that form of gastric derangement in which an excess of hydrochloric acid is secreted, he referred to somewhat at length because it is exceedingly common, accompanied nearly always by severe neurasthenic symptoms, including especially insomnia, etc.; and yet, being only demonstrable by the tube after a test meal, is very generally overlooked.

The writer dwelt especially upon the almost constant association of hyperacidity with constipation and suggested as an explanation of the connection, that the superacid contents of the stomach upon passing into the bowel inhibit or greatly diminish the activity of the intestinal ferments, which require an alkaline or at least a neutral medium, and that besides this serious interference with intestinal digestion, the excessive acidity may set up irregular or spastic contractions of portions of the gut. He had felt these contracted portions in such cases and considers the constipation thus produced an important link in the chain of causes which result in autointoxication.

* *

PREGNANCY AND LABOR COMPLICATED BY UTERINE FIBROID TUMORS.—In a paper read before the Southern Surgical and Gynecological Society, November 10, 1896, Dr. Henry D. Fry of Washington, D. C., stated that his aim was to present the subject for discussion from the standpoint of the obstetrician and not the gynecologist. The treatment of a woman with a rapidly growing tumor is of secondary importance. The management of pregnancy complicated by this condition is of prime importance and the claims of the child are brought forward for earnest consideration. The propositions he wished to advance were :

1. The production of abortion was unjustifiable.

2. Labors presenting serious difficulty to delivery were best treated by abdominal section and removal of the child and tumor. By maintaining this

position the interests of the mother were not relegated to second place. While saving the life of many infants, the maternal mortality will also be diminished.

He next directed the attention to some points bearing on the natural history of fibroids complicating the pregnant state, and before taking up the question of treatment, he briefly referred to the histories of some cases that had come under his observation. Under treatment he first considered the proposition: The production of abortion is unjustifiable.

1. Because it destroys the life of the child. In some cases, however, it is unavoidable, but in others the gestation may be prolonged to viability or even to the full period. In a certain portion of the latter cases, delivery may be terminated *per vias naturales* when early in gestation it had seemed hopeless. Who, then, is warranted in destroying the embryo in early pregnancy because of the presumable difficulties that may not be overcome? Given a case which has passed through utero-gestation without a favorable change in the obstruction produced by the tumor, what then? Still give nature a chance. Under the influence of labor pains the growth may yet recede out of the pelvis. The constriction of the longitudinal muscular fibers, their rearrangement in the corpus, the thickening of the uterine wall above the ring of Bandl and the thinning of the lower segment of the uterus, are well established physiological changes. These may elevate a pathological excess of tissue above the contraction ring.

While recognizing nature's claims to a fair trial we must be careful not to permit the labor to be prolonged sufficiently to exhaust the woman and jeopardize the chances of surgical interference. In cases where the destruction of the life of the child is unavoidable the production of abortion is still not warranted. The dangerous complications that so often set in after spontaneous abortion in these cases cause a maternal mortality of 12 per cent. The constrictions and tortuosities of the cervical canal

prevent the complete expulsion of the ovum. The deficient drainage adds to the invitation for septic trouble, which too often spreads to fibroid growths. The success of active local treatment is often defeated and it is impossible to clean out and disinfect the cavity of the uterus. The same difficulties and dangers apply with greater force to the artificial production of abortion. Cases of pregnancy complicated by fibroids of the uterus which cannot proceed either to viability or full term demand interference of two kinds :

1. To remove the obstacle and then to permit the gestation to proceed, or—
2. If this be impossible, to remove the tumor and pregnant uterus by supravaginal or complete hysterectomy. The second proposition is maintained in view of the great mortality that experience shows will follow efforts to extract *per vias naturales*. In all cases presenting serious difficulties surgical interference offers better chances for mother and child.

Cesarean section should not enter into consideration in this class of cases, owing to the frightful mortality that has resulted. The disastrous result of closing the uterine wound when a fibroid growth exists in the organ is enough to banish it, besides the objection if the woman should recover she will continue to have a diseased uterus. The choice of method will rest between a Porro and hysterectomy. The Porro is permissible only when the uterus is situated sufficiently high to permit construction of healthy, uninvolved tissue below it. Hysterectomy may be complete or supra-vaginal amputation. Fibroids situated low in the pelvis are better treated by complete hysterectomy.

* * *

HEMATOMA OF THE VULVA AFTER NORMAL LABOR.—Lefranc (*British Medical Journal*) detected a hematoma of the right labium majus two hours after delivery. It grew rapidly larger under the eyes of the observer, extending to the anus and to Douglas's pouch. It was laid open and packed with iodoform gauze. The forceps had not been used.

The patient was free from cardiac or vascular disease, and there was no trace of varix, no narrowness of the vagina, and no contraction of the pelvis. Most probably the vagina (which was involved in the hematoma) had become detached from the subjacent tissue to a considerable extent.

* * *

VIBURNUM PRUNIFOLIUM A PROPHYLACTIC AGAINST ABORTION.—Manuel Guitierrez, Mexico (*American Gynecological and Obstetrical Journal*), without deprecating the value of pathological indications in the prevention of abortion, asserts that, whatever be the occasional cause of abortion, the essential condition is the contractility of the uterus; hence in preventable cases a remedy must be used which will abolish uterine contractions with the least general systemic disturbance. *Viburnum prunifolium* has, in his experience, fulfilled this indication, being a true uterine sedative. He employs the fluid extract in doses of twenty drops, three times a day, when no active symptoms exist; when uterine contractions are present it can be repeated as often as need be, combined with tinct. opii or morphine. He reports ten cases with complications successfully treated with *viburnum prunifolium*—two with uterine fibroids; two with prolapsus uteri; four with retroversion; one habitual abortion from excessive hard work; and one from tuberculosis.

* * *

PUERPERAL ECLAMPSIA.—In a paper read before the Delaware State Medical Society, Dr. Charles M. Ellis of Elkton, Maryland, gave the indications for the necessity of artificial delivery. He called special attention to the great danger of the convulsions of pregnancy before term. His experience included eight cases, occurring at different stages of pregnancy, and showed clearly that when a convulsion occurs before term, unless it is of systemic origin, immediate delivery is imperative, without regard to the presence or absence of uterine contractions or the condition of the

os as to dilatation. If the convulsions begin early, the uterus should be emptied by the most expeditious method, and all medicinal treatment should be secondary to this one great object. This is necessary for the reason that the percentage of fatalities from eclampsia is fully 50 per cent.

This high death rate is greatly exceeded when the delivery is not accomplished, or if it is delayed until several convulsions have occurred, or until uterine contraction and dilatation have supervened. Of the eight cases seen by the author, five died and three recovered. Of the five that died premature delivery was effected, one on the sixth day after the initial convulsion, one forty-eight hours after, one eighteen hours after, three others having followed, and the patient being moribund at the time, and one lay in convulsions three days without any attempt at delivery. The experience gained from these eight cases would certainly justify premature delivery.

Dr. Ellis had never seen a death occur before delivery after the operation had been initiated, and he believed the uterus should be evacuated immediately after the first convulsion. When albumen appears in the urine the more imminent is the danger of eclampsia, and, if this accident is threatened, it may be necessary for the attending physician to hasten delivery without waiting for the convulsive seizure. The speaker denounced the indiscriminate use of morphia hypodermically in cases like these.

* * *

OSTEOMALACIA CURED BY OÖPHORECTOMY.—Piretti (*British Medical Journal*) adds another to the already long list of cures of osteomalacia by oöphorectomy, but his observation is especially interesting on account of the extraordinary success of the operative treatment. The case was a severe one, yet within a month of the operation the condition was greatly improved, and four months later the patient's health was practically re-established, and she had gained 25 cms. in stature.

Obituary.

PHILIP C. WILLIAMS.

IN the death of Dr. Williams the profession loses one of its oldest and most distinguished members and the community a good and faithful citizen.

Dr. Williams was born at Winchester, Virginia, in 1828, and was the son of the late Philip W. Williams, a well-known lawyer of that place. He was graduated from the University of Pennsylvania in 1850 and came to Baltimore to live and practice. Dr. Williams rapidly attained a high position and became a member of the State, local and national medical societies.

He was a keen observer and carefully recorded the best of his work. He contributed to medical literature and the files of the MARYLAND MEDICAL JOURNAL give evidences of his ability as a writer. Probably the most widely read of his medical publications which bore a medical-legal aspect was a report of the celebrated Ketchum-Wharton case.

Dr. Williams was not only a successful physician and a good citizen, but also a devout and earnest Christian, having been for years a member of Christ Protestant Episcopal Church and a vestryman of that church. At the time of his death he was junior warden of the church and always represented it at the diocesan convention. The beneficent effects of his Christian life were felt by his patients, to whom he brought not only bodily, but spiritual, relief.

In addition to all these good qualities, Dr. Williams was an ardent prohibitionist, preaching by deed as well as by word the good effects of total abstinence. The immediate cause of his death was Bright's disease, from which he had suffered for several years.

Among his children is Dr. John Whitridge Williams, who is at the head of the obstetrical department at the Johns Hopkins University. Another son is at the Hopkins Medical School.

Dr. Williams' death is a great loss to the whole community and the large number who paid respects to his memory at the funeral attest to some degree how he was beloved.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

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BALTIMORE, NOVEMBER 28, 1896.

THERE is much talk in the land about therapeutic nihilism. A certain type of practitioner, full of faith in *Therapeutic Nihilism*, his drugs and full of ignorance of the nature of disease, views with apprehension the advent of doctrines which throw doubt upon the efficacy of his multiterbal and multialkaloidal prescriptions. If he cannot cure disease with his pills and powders, pray, what is his function, what excuse can he possibly bring forward for the brass plate upon his house front, and more especially for the monthly bills rendered? Evidently he has an interest in arresting the progress of this tendency toward therapeutic nihilism!

Practitioners of this stamp excite our sympathy. The sympathy is concerned, however, less with the actual position of therapy than with the failure of those with whom we speak to comprehend the advances which are being made in the healing art. The physician who told his neurasthenic patient the other day "the only thing which has kept you alive for the past two years is the fact that *I have kept you full of drugs*," if he be-

lieved what he said, deserves our pity. We cannot, however, at the same time omit expressing pity for his patient.

We are much mistaken if there be many medical men who are in reality nihilistic as regards therapy. The term "therapeutic nihilist" has been improperly applied. Because the medical man in this age refuses to order the old-time condition powder or the veterinary bolus over which our fathers gagged, must he be dubbed therapeutic nihilist? If the physician, enlightened by experience at the bedside and at the autopsy table, failed to believe in the advantage of large doses of digitalis in well compensated lesions of the heart, or of concentrated solutions of iodide of potassium given internally to absorb the connective tissue in the form of advanced Bright's disease in which the kidneys are contracted, must he be called a medical "do-nothing"? Even if he prefers to restrict his drug prescriptions for human beings to a comparatively small list of chemical substances whose favorable action has been completely demonstrated and to reserve his experiments with untried poisonous alkaloids for laboratory animals, is he to be decried as an enemy to the profession and to the public weal?

We believe that the majority of our readers will agree with us if we answer in the negative. If to withhold drugs when they are likely to do harm or even when we have no sufficient evidence that they will do good, trusting in such cases rather to the reparative powers of nature herself, be therapeutic nihilism, then let such nihilism prosper. The well-judged rejection of certain drugs is as important for the modern therapy as is the studied rejection of phrases by the cultured writer.

As a matter of fact, therapy has recently made enormous advances, advances more extraordinary than the sanguine expectant of thirty years ago could have hoped. While it is true no small part of this advance has consisted of negation and of prevention, still the lion's share of progress has been made up of positive additions to our therapeutic stores. As a result almost entirely of animal experiment we have been given, for example, a sero-therapy and an organo-therapy, which though the germs of the treatment are perhaps recognizable in the habits of a Mithridates and the concoctions of the world's

witches, come to us now for the first time physiologically well based.

As might have been expected, however, the phenomenal results obtainable by the legitimate use of Behring's serum and of thyroid extract have led the impatient and the untrained to employ all manner of serum and powdered organs in a whole host of affections, often in as reckless and unscientific manner as that which has characterized the indiscriminate administration of drugs and alkaloids of the period immediately preceding this. With every new harvest of rich grain we gather also a wilderness of weeds. Truly the fresh perfection treads close, very close, upon the heels of the therapeutic past; the old darkness is difficult to dissipate, the shapeless chaos unwilling to be ruled.

It is only very slowly that we have learned that the body of man in its long struggle with environment has developed chemical mechanisms of defence of a complexity in comparison with which the profoundest subtleties of the organic chemist are but the simplest prolegomena. Several thousands of years of experience have been necessary to convince us that fresh air, the light of the sun, good food, sufficient quantity of sleep and suitable alternation of rest and activity of all the organs of the body are the agents which more than all others are effective in the maintenance of health and in its restoration when the body is diseased. All medical men tacitly acknowledge these truths, but to few, very few, do they have full, vital meaning.

It is a sad but remarkable coincidence that two such men as Sir Benjamin Ward Richardson in London and Dr.

Lessons from a Sad Coincidence. Philip C. Williams of Baltimore should have both lived a noble, conscientious life, attained a high professional and social position, contributed largely to medical literature, worked hard for the cause of temperance and then both should lay down two such lives on the same day and at the same age. Both were born in 1828 and both died aged 68.

The question that pathologists have asked themselves for a long time is as to what effects drinking and total abstinence have on kidney disease. Here are two men who led sober, industrious and abstemious lives and yet who both died at an age which in these days is not considered far advanced.

The etiology of Bright's disease has so often been put down to various causes, the leading one of which is excessive drinking. Certainly these two lives were remarkable exceptions and many other exceptions could be found. There are probably many other causes which are not sufficiently recognized, but which play an important part in the etiology of renal disorders. It is certain that virulent poisons are generated in the body and if these are retained the results are dire.

The theory has been advanced that not only drinking alcoholics, but the abstention from drinking water, paves the way for various kidney and liver diseases. Still further, the slow action of the bowels causes to be retained in the lower alimentary canal decomposing products which most certainly slowly poison the whole system.

The moral of this in part is that the person who advocates temperance or total abstinence from alcoholic liquors in food or drink should endeavor so to illustrate the good effects of abstemious living by ridding the body of effete matters and obtaining the requisite amount of rest and exercise, so that a long life may be the best proof of a lesson taught during life.

THE Health Department of Baltimore has announced that it is prepared to make a diagnosis for physicians of *Municipal Diagnosis*. Baltimore of suspected cases of diphtheria and tuberculosis. Stations have been selected and their location will shortly be announced where physicians may find culture tubes and swabs for diphtheria diagnosis and where also bottles of suspected sputum may be left. This will be done free of charge for physicians of Baltimore. This city is a little late in following the other cities in this method, but the tardiness is probably due to the mayor-councilmanic muddle.

If the method of detecting typhoid fever by the new blood examination is practical (and it seems to be in other cities), it is a pity that the health department did not see fit to add this to their list.

If physicians do their duty in sending specimens in as they should in all suspected cases, the city bacteriologist will be a very busy man unless he can procure assistance. This is a step in the right direction and is better late than never.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending November 21, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		18
Phthisis Pulmonalis.....		16
Measles.....		
Whooping Cough.....	4	
Pseudo-membranous } Croup and Diphtheria. }	22	8
Mumps.....	4	
Scarlet fever.....	25	
Varioloid.....		
Varicella.....	7	
Typhoid fever.....	10	2

The Pan-American Medical Congress at Mexico is said to be a great success. Dr. William Pepper was elected president for the next meeting.

Joseph Jefferson, the actor, at the request of his friend, Dr. George Reuling, gave a talk last week to the students of the Baltimore Medical College.

Dr. William G. Claytor of West River, Anne Arundel County, Maryland, died last week after a serious operation at the Johns Hopkins Hospital. Dr. Claytor was a graduate of the University of Maryland in 1852.

Dr. John Seibert, a wealthy recluse of Chicago and a native of Washington County, Maryland, died at Chicago last week. Dr. Seibert was a graduate of the University of Pennsylvania and had retired from practice.

Sir Benjamin Ward Richardson, M. D., F. R. S., etc., of London, England, died last Saturday, aged 68. He was a member of many prominent medical societies, a wide contributor to literature and well-known the world over as an ardent temperance advocate.

The Journal of Nervous and Mental Diseases announces the following arrangement of its staff for 1897: Editors, Drs. Chas. L. Dana, F. X. Dercum, Philip Coombs Knapp, Chas. K. Mills, Jas. J. Putnam, B. Sachs and M. Allen Starr; Associate Editors, Drs. Philip Meirowitz and Wm. G. Spiller; Managing Editor, Dr. Chas. Henry Brown.

The following physicians were elected at the last meeting of the Clinical Society: Drs. John J. Abel, Joseph C. Bloodgood, John G. Clark, Claribel Cone, Thomas S. Cullen, Henry B. Jacobs, Sylvan H. Likes, G. Milton Linthicum, John C. Morfit, Henry Page, S. Paton, Wilbur M. Pearce, Otto G. Ramsay, Wm. W. Russell, Mary Sherwood, Lilian Welsh.

It is proposed soon to have in Baltimore a meeting of all county and local health officers from all parts of Maryland together with the State Board of Health and a number of the city physicians to talk over the health of the State. The Health Board has of late had several outbreaks of diphtheria to contend with and in one small town cases existed in several houses in close connection, none of which were in the best sanitary condition.

Physicians practicing in the mining region of Maryland met at Frostburg last week and organized the George's Creek Medical Association, with Dr. C. C. Jacobs of Frostburg as president and Dr. W. O. McClean of Frostburg as secretary. The members of the association are: Drs. A. G. Smith of Midland; S. A. Boucher of Barton; Fasnaker of Westernport; B. M. Cromwell of Eckhart; J. O. Bullock of Lonaconing; A. B. Price, C. C. Jacobs, W. O. McClean, J. H. McGann, Timothy Griffiths, J. M. Price and J. Cobey, of Frostburg. Resolutions were passed on the death of Dr. Thomas Price of Frostburg, who was run over by a train. The association will meet monthly.

The Tri-State Medical Association of Western Maryland, Pennsylvania and West Virginia will meet at Cumberland, Maryland, Thursday, December 3, 1896, at 1.30 P. M. The following is the programme: La Grippe, Dr. C. H. Ohr, Cumberland, Md.; Puerperal Eclampsia, Dr. T. Griffith, Frostburg, Md.; The Science of Generation and its Phenomena, Dr. Wm. F. Barclay, Pittsburgh, Pa.; Treatment of Inebriates, Dr. S. A. Boucher, Barton, Md.; Mummification of the Fetus, Dr. H. W. Hodgson, Cumberland, Md.; Hysterectomy for Septic Conditions of the Uterus, Dr. T. A. Ashby, Baltimore, Md.; An Interesting Case, Dr. A. Harris, Parkersburg, W. Va.; Foreign Bodies in the Trachea, Dr. A. F. Spicher, Elk Lick, Pa. Dr. Percival Lantz, Dr. F. W. Fochtman, Secretaries.

Book Reviews.

PRACTICAL NOTES ON URINARY ANALYSIS.

By William B. Canfield, A. M., M. D., Lecturer on Clinical Medicine, University of Maryland, etc. Second Revised Edition. Detroit: George S. Davis, 1896. Pp. 7 to 105. Price, cloth, 50 cents; paper, 25 cents.

In this little work the author has outlined the rudiments of urinary analysis with which every physician should familiarize himself. The more important chemical tests and methods of microscopical examination are briefly, yet clearly, described. The writer describes the use of certain test papers and tablets in the examination for albumen and sugar, pointing out the great convenience of the reagents employed in this form. While we are not familiar with these methods, we should conclude, nevertheless, that it were better not to educate the practicing physicians to devices which of necessity must furnish results of questionable accuracy. We regret to find that the clinical significance of the results which may be obtained are not sufficiently detailed. To the beginner and the overbusy practitioner the little book will certainly be of value. The publisher's work has been well done.

REPRINTS, ETC., RECEIVED.

Catalogue of the Louisville National Medical College, 1896-97.

Annual Announcement of the New York Post-Graduate Medical School and Hospital for 1896-97.

College of Physicians and Surgeons, Baltimore. Annual Announcement and Catalogue. 1896-1897.

Some Studies of the Blood in Thyroid Feeding in Insanity. By Middleton L. Perry, M. D. Reprint from the *Medical Record*.

The Physical Director in the Second and Nineteenth Centuries. By Edward Morton Schaeffer, M. D., Baltimore. Reprint. 1896.

A Critical Study of a Few of the Changes Found in the Field of Vision, taken whilst the Eyes are Placed at Right Angles to the Ordinary Position. By Charles A. Oliver, A. M., M. D. Reprint from *Brain*.

The Frequent Dependence of Insomnia, Mental Depression and other Neurasthenic Symptoms upon Disease of the Gastro-Intestinal Tract. By Boardman Reed, M. D., Atlantic City, N. J. Reprint. 1896.

Current Editorial Comment.

TYPHOID FEVER.

Boston Medical and Surgical Journal.

FROM the evidence before us we think it reasonably certain that we have in Widal's serum reaction a valuable method of diagnosis in the later weeks of typhoid, and it seems not impossible that some similar method may be applied to the diagnosis of other diseases.

TIME FOR READING.

Atlantic Medical Weekly.

THERE is an old whist adage that it is unnecessary for a player who disregards all the rules of the game to announce that he never read a book on whist in his life, his play shows that; so with the physician who has no time to read, his practice will soon make that fact evident.

PUBLIC SPITTING.

Medical and Surgical Reporter.

THE American people have two ubiquitous manifestations of vulgarity. One is the irresistible desire to leave an autograph wherever the sublimity of nature or the ingenuity of man attracts a crowd; the other is indiscriminate spitting, regardless of the desecration of natural beauty, or of the contamination of places where human beings must live and congregate.

ETHICS IN EDUCATION.

The Hospital.

OF all the professions the medical is brought into the most intimate contact with delicate and embarrassing situations. Yet the medical student, alone among young professional men, is never during the whole of his curriculum offered any definite instructions in the art and practice of professional business and professional conduct. Chairs of ethics, or at least one general lectureship, should be established.

MEDICAL EDUCATION.

Philadelphia Polytechnic.

THE fourth year added to collegiate medical studies should be a preparatory, rather than a finishing, year; should be concerned with laying the foundations broad and deep, rather than with ornamenting the roof. Languages are desirable, but French and German much more than Latin and Greek; none of these is indispensable, though he who has them all will unquestionably be better equipped as scholar and as man. Scientific branches, however, are absolutely necessary.

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
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State Societies.

NOVEMBER.

27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

DECEMBER.

1. LYCOMING COUNTY (PA.), at Williamsport, Pa.
3. TRI-STATE, of Western Maryland, Western Pennsylvania and West Virginia, at Cumberland, Md.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.
16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d and 4th Mondays of each month at 8 P. M.
THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 2d Friday and 4th Monday, at 8.15 P. M.
MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. RUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

A STANDARD PREPARATION.—There is no product before the profession today that has received higher commendation or more generally commands the confidence of physicians than Imperial Granum. Its varied uses and applications as a food for nursing mothers, infants, children, invalids and convalescents, give it such a wide range of employment as to constitute one of the most valuable and essential articles available. It may be classed as one of those very rare preparations which does not disappoint, but is all that is claimed for it. The unrivaled and unvarying purity of Imperial Granum, its palatability and valuable dietetic properties, have been recognized everywhere during the long term of years it has been manufactured and employed by physicians.

THE rapid demand for that new and indispensable instrument in physical diagnosis known as Bianchi's Phonendoscope demonstrates the long-felt need of an instrument which would prove thoroughly efficient in distinguishing heart sounds, murmurs and rates; and in the transmission of the fetal heart sounds, which are but imperfectly done with the stethoscope, upon which the profession has had to depend so long. The instrument is manufactured by H. A. Kaysan, Brooklyn, N. Y.

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Original Articles.

CEREBRAL SYPHILIS.

By George J. Preston, M. D.,
Baltimore.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

WITHOUT going into the pathology of cerebral syphilis it will be remembered that the disease generally attacks the structures formed from the mesoderm.

Thus the tissues invaded are :

1. The skull.
2. The meninges.
3. The blood vessels.

It is quite probable, as Gowers points out, that syphilitic lesions occupying, as they occasionally do, deeper parts of the cerebrum, have followed the blood vessels down, or can be traced up to the pia mater. Syphilitic disease of the skull causing caries or exostosis may be widespread or localized and the same thing may be said of syphilitic meningitis, which may extend over large areas of the base or convexity of the brain, or confine itself to a very limited space, constituting the characteristic focal meningitis. The blood vessels may be affected generally or as the result of local disease.

Syphilitic disease of the cortex presents, according to Darier, three distinct forms :

1. Diffuse gummatous infiltrations.
2. Localized patches of encephalitis.
3. Patches of sclerosis.

From the foregoing résumé of the anatomical lesions produced by syphilis it is evident that the symptomatology of

cerebral syphilis must present great variety. Thus we may have symptoms of general arterial involvement eventuating in thrombosis or hemorrhage, differing in few particulars from arteriosclerosis from other causes. Again, the meningitis and encephalitis met with are not always to be distinguished from like conditions of very different etiology. Finally, we may often have a perfect picture of brain tumor without suspecting the nature of the lesion.

As we know, the history of the primary lesion is notoriously uncertain, so that we are often compelled to decide by the character of the symptoms.

Moreover, syphilis of the nervous system may follow the primary lesion after a very long interval. Most frequently perhaps two or three years elapse between the occurrence of the initial lesion and the involvement of the nervous system, but this interval may be almost indefinitely prolonged.

It is not uncommon to see the nervous system invaded ten, fifteen or twenty years after the occurrence of the chancre, and the average individual is not to be expected to remember accurately the details of a sore on his penis which dates back twenty years.

Syphilitic disease of the bones of the skull fall within the province of surgery

and the pressure symptoms which are sometimes present are easy to recognize. Syphilitic meningitis presents certain features which are somewhat characteristic. In the first place, the process is nearly chronic, the symptoms coming on gradually. Then this variety of meningitis is for the most part localized.

When a considerable extent of the meningeal surface, either basal or cortical, is involved, one side is apt to be much more affected than the other, or there appear certain foci of intensity. With the meningitis there is very often associated more or less encephalitis. When the syphilitic growth, starting, as has been said, from the meninges, invades the substance of the cerebral hemispheres, we have a picture of brain tumor.

Of the general symptoms the one that usually attracts attention first is the headache. This may be localized or diffuse, basal or cortical, very continuous, with exacerbations which usually occur at night. Not infrequently this headache is associated with insomnia. If the basal meninges are involved, which is the case in a large proportion of all cases, then we have paralyses of the cranial nerves.

The most frequent paralysis is that of the third pair, giving ptosis and disturbances of motion of the eyeball. The fourth or sixth pairs of nerves are not as frequently affected as the third. Of course it must be remembered that paralysis may be due to the involvement of the nucleus or nerve trunk. While the onset and course of nuclear and peripheral paralyses present marked differences it is sometimes difficult to make a clear diagnosis between them.

In general the gradual appearance and slow course of the paralysis together with the fact that an involvement of part of a nerve or rather of certain branches only, with other bulbar symptoms, point to disease of the medulla. Involvement of the optic nerve may give rise to some form of hemianopsia. The double optic neuritis which is so common in basal menin-

gitis is a symptom of great diagnostic value.

The facial nerve may be involved and occasionally the other cranial nerves, as in Case VI, in which there was transient disturbance of the tenth pair. Hemiplegia from syphilitic arteritis is common and resembles ordinary apoplexy except that it is often of very much slower onset without loss of consciousness. It is also possible to have a hemiplegia due to involvement of the crus. Sometimes, as in Case V, the involvement of the medulla gives rise to polyuria or even mellituria.

When the vertical meninges or the subjacent cortex is affected it is very common to see epileptiform seizures. These attacks do not differ materially from epilepsy from other causes except that it has seemed to me that they are far more apt to be followed by transient paralyses and distinct mental symptoms. Again, syphilis of the vertex induces many mental symptoms which are not connected with convulsive seizure. The insomnia, which has been alluded to, and the still more frequent condition of somnolency, are very generally met with. In some cases, particularly when the meningitis runs a rather acute course, there may be present marked excitement with wild delirium, followed by somnolency or coma. This may make its appearance early, or may follow later in the course of a general mental degeneration, as is shown in Case II.

Perhaps the most common form of mental disturbance is that of depression with mental hebetude and general change of disposition. This condition is not so much one of depression as of apathy. The patient is not able or at least not inclined to any effort. Sometimes they are irritable, but more often in my experience apathetic and expressionless. These cases simulate very closely general paresis of the insane, and probably the mistake is not infrequently made clinically. As a rule, there is wanting the distinct delusion of grandeur, and the paralysis, aphasia or other evidence of focal disease clears up the diagnosis.

As has been said, it sometimes happens that the syphilitic inflammation

follows the meninges or the blood vessels down deep in the ganglia or white matter of the cerebral hemispheres, in which case the only symptoms are those of intracranial tumor. Most frequently, however, even in cases of this variety there are lesions elsewhere, either meningeal or focal.

In general it may be said that the characteristic symptoms of cerebral syphilis are the irregular course of the disease, not confining itself to any system of fibers, attacking now one part of the brain, now another, more frequently multiple than single; the transient nature of the paralyses; the frequent involvement of the eye muscles; the intense headache; the somnolency and the peculiar manifestations, now a state of excitement, now of depression or apathy. Contrasted with any of the other forms of brain lesion the multiformity of the symptoms and their irregular course cannot fail to impress the observer. The following cases present some points of interest.

Case I. Seen in consultation with Dr. H. B. Thomas. The patient, a man of 36, had always been healthy, and with no neuropathic heredity. In 1893 he had a chancre for which he was treated. In July, 1895, he had dragging of the right leg, with loss of power of the right arm, and with this was associated a distinct motor aphasia. These symptoms disappeared under antisyphilitic treatment. I first saw the patient in January of this year. At that time his condition was as follows: His speech was fairly good, there being a little tendency to slurring in his articulation, but no aphasia.

His memory was almost entirely gone for recent events and greatly impaired for things that had happened years ago. For example he could give only a very vague account of his syphilitic trouble of three years previous, while he could not remember the name of his law partner, nor the street upon which he lived. On being asked what he had for breakfast he laughed in a silly way and seemed rather ashamed of the fact that he could not remember. He was unable to recall the names of his relatives, or

to tell any events happening during the past few days.

There is decided loss of power in the limbs and the reflexes were exaggerated. Examination of the eyes showed no muscular paralyses. Ophthalmic examination showed great congestion of the disc in the left eye. There is absolute homonymous hemianopsia right. He complains of severe and continuous pain on the left side of his head. Sexual desire was greatly increased. He was put on large doses of iodide of potassium with biniodide of mercury and mercurial inunctions. For a time he got steadily worse and I did not think he could possibly recover.

There was a condition of dementia and for three weeks he had to have an attendant, as he would set fire to pieces of paper in his room. He was unable to dress himself, not for lack of strength, but he seemed not to know the use of the various objects about him. For example, he would try to put his stockings on his head. He would wander about the house and did not sleep much. The only indication of iodism he had was a diarrhea which was troublesome. The picture he presented at this time was distinctly one of terminal dementia.

On February 29, about a month after my first examination of him, I again made a careful examination of his condition. His general condition was fairly good; return of strength, but still showing greatly exaggerated reflexes. The eye ground showed the discs pale and well defined, especially to the left. The pupils were dilated and reacted rather sluggishly. The hemianopsia had nearly entirely disappeared. His mental condition was still distinctly below par; his memory was bad and his general appearance complacent; laughing frequently in a silly and meaningless way.

There is a complete blank in his memory from January 15 to February 15. He says that during this period he thinks his mind was occupied with Arctic exploration, about which he had probably been reading. I saw him again on September 9. He seemed in perfect physical condition. There was

no paralysis, the reflexes were about normal and there was no trace of the hemianopsia. He says that his memory is about as good as ever, though his physician thinks it still impaired. He seems to lack concentration, and is not inclined to get to work.

The treatment of this case might perhaps be considered heroic, though the results were gratifying. When I first saw him January 21, he was put upon rapidly increasing doses of potassium iodide until he reached 480 grains a day. This daily dose was continued for three weeks, then reduced to 180 grains, which was continued until June 1. Since that time he has been taking 30 grains a day. At first for three weeks he had two mercurial inunctions a day and for three months $\frac{1}{8}$ of a grain of the biniodide of mercury. During all this time there was no evidence of iodism or salivation except the diarrhea mentioned.

Case II. This case illustrates another phase of cerebral syphilis. Mr. T., aged 43, was brought to the City Hospital February, 1896. He had fallen on the street and the attack was, from the history, epileptiform. On March 18 he had another similar attack and fell and became unconscious. In both these attacks the left side was apparently involved, since he was rather weaker on that side for some days subsequent to the attacks. On the 4th of May last he was brought to the City Hospital after having had another attack. He remained as a private patient for about two weeks.

During the greater part of his stay at the hospital he was in a state of stupor, and after he regained full consciousness his mental condition was not good. He seemed in a state of exaltation, and was very anxious to go to work, and in fact left the hospital before he should. On the 29th of May of this year while sitting at the table he suddenly dropped his knife and fork, his face became pale, he frothed at the mouth and his limbs jerked, mainly on the left side. After this attack he was unable to walk for ten days. From the time he left the hospital, on May 4, until this time he

had been taking potassium bromide with moderate doses of iodide.

Syphilis was suspected, but he did not admit having had the disease until after this last attack. He was then put upon large increasing doses of iodide, but, as his wife told me, did not take the medicine very regularly and would not come to my office at the times appointed, assigning as a reason that he was all right and did not need any more medicine. The condition of exaltation became more pronounced and when irritated he was difficult to manage. His mental condition became progressively worse and he had a number of attacks. The history of the attacks showed them to be distinctly epileptiform, though after the attack there remained a certain amount of general weakness, particularly on the left side.

It was suggested that he submit to an operation and after some weeks he was brought to the hospital for that purpose. By this time he was maniacal and his general condition was so bad that it was thought best not to interfere surgically. Besides, there was very little to go on for localization. He had complained for months of headache but the pain was not localized, and the weakness in his extremities, which had formerly been most marked on the left side, became general. An ophthalmic examination made about June 1 showed the discs blurred and the vessels thin and tortuous. His condition grew gradually worse in spite of the vigorous pushing of the iodides and mercurial inunction, and he died the latter part of August.

Case III. John L., a patient at the City Hospital, with a history of syphilis dating back three years. Patient complained of intense pain in his head and percussion over the head showed the whole left half of the skull to be extremely sensitive. There was no rise of temperature. He suddenly developed unconsciousness, with spasmodic twitching on the right side. In a day or two there developed a left hemiplegia. Mercurial inunction was vigorously pushed, and in the course of a few weeks the paralysis disappeared. This patient never regained his mental balance per-

fected, and is now an inmate of Bay View Hospital.

Case IV. This case need not be referred to except that it was curiously similar to the preceding one. A man about 25, seen in consultation with Dr. W. T. Riley. When I saw the patient he was comatose, with convulsive twitchings on one side, and this condition had developed gradually. He was put upon vigorous mercurial inunction and iodide as soon as he could swallow the latter and had recovered with slight loss of power on the side opposite the one in which the spasmodic movements had occurred.

Case V. This patient, a woman of about 40 years of age, I have seen from time to time during the past five or six years. She first had an apoplexy, leaving a hemiplegia, and afterwards developed a very marked polyuria. I have always regarded the case as distinctly one of syphilis though antisyphilitic treatment has had little effect.

Case VI. A man 31 years of age, with a history of syphilis dating back 10 years. In this case there was the history of imperfect treatment of the early stage. In April, 1896, he had paralysis of both external recti muscles which lasted for four months. About the middle of August he developed a ptosis of the left eyelid, which rapidly became complete and soon after the movements of the eyeball were affected. Two weeks later the right eye became involved in exactly a similar manner. When I saw him in September he had complete double ptosis, and the only movement he was able to make with his eyes was a slight outward rotation of the right eye. At this time he had at times, and without any cause, an extreme rapidity of the pulse, reaching 140 or over. There are no symptoms of the involvement of other parts of the nervous system. He has distinctly improved under specific treatment, though the move-

ments of his eyes are yet very limited. These cases are very briefly mentioned, without going into the details of the histories, in order to illustrate some of the most important symptoms of cerebral syphilis.

Nothing has been said about the therapeutic test in the diagnosis of cerebral syphilis, because I think we should make up our minds concerning the case and then treat it vigorously. It is a notable fact that we get better results in the treatment of late manifestations of syphilis, especially syphilis of the nervous system, in this country than are obtained on the Continent, and I am firmly of the opinion that this is on account of the far more vigorous nature of the treatment in this country. It is the experience of most American neurologists that cases that have been treated with moderate doses of potassium iodide with slight benefit will often recover under the heroic doses, with perhaps mercury in addition. By heroic doses I mean from 300 to 500 grains of iodide a day.

This looks, as somebody has said, like a waste of good medicine, but there can be no doubt of its efficiency. Until we have some clearer knowledge of the physiological action of the salts of iodine we are justified in this empirical method of administration.

Finally, it is possible that a certain number of cases of cerebral syphilis are regarded as cases of general paresis, and no vigorous treatment employed, and that, too, at the time when this treatment would be most effective. The plea then that I would make is for more exactness in diagnosis and a more vigorous exhibition of iodide of potassium and mercury. There can be no doubt of the fact that the administration of mercury either in the form of the biniodide or as an inunction very materially aids the action of the potassium iodide.

WOMAN'S MILK AND ANTITOXINE.

SCHMID (*British Medical Journal*) thinks that the protective material taken up in the mother's blood during treatment passes into the milk, though in smaller relative proportions. Sucklings

rarely contract diphtheria. He insists that, in association with the subject of antitoxine treatment of mothers with diphtheria, it is necessary to ascertain how long the infants' blood naturally resists the diphtheritic poison.

CONTINUED FEVERS.

By C. Birnie, M. D.,
Taneytown, Md.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

By continued fever I mean a fever lasting from two weeks to six weeks, or sometimes longer, lacking the characteristic symptoms and lesions of typhoid or malarial fever and not due to any definite lesion.

Two typical cases that occurred in my practice during the past summer will serve to illustrate the course of the disease.

Miss X, aged 35, with a good family history, never had any illness and never had a physician visit her professionally, had been complaining for a few days previous to June 24 last, of irregular appetite, constipated bowels and general malaise. On that day, while temporarily assisting her brother-in-law in his drug store, she was taken with a slight chill, followed by nausea and a feeling of faintness.

When I first saw her she was feeling weak and faint, skin pale and clammy, pulse 60, feeble and of small volume, constant nausea and occasional vomiting, temperature 97.5° . A few hours later the nausea and vomiting were somewhat relieved, temperature normal, pulse 70, still weak.

Her temperature rose gradually until the third day, when it reached 103° . Her fever lasted two weeks, the temperature never getting above 103° and never falling below 100.5° , the pulse ranging from 80 to 100. The nausea passed away after the first week and did not return but twice, when it was due to error in diet.

Convalescence was rapid and she is now in her usual health. The diagnosis was by exclusion. There was no diarrhea, the bowels being slightly constipated; no tympanites, no spots, no hemorrhage, no delirium, no stupor, no characteristic rise of temperature, nor at any time marked debility. There was a morning remission and an evening

exacerbation, as there is in all fevers, but it was not regular.

Malarial fever was excluded by the absence of regular remission and by the fact that antiperiodics had no effect whatever on the disease. A careful examination of all the organs failed to show any lesion which would account for the fever. There was a little gastric catarrh, possibly a slight enlargement of the spleen, and the urine was high-colored fever urine, but entirely free from albumen or sugar.

She accounted for the persistence of the nausea by attributing it to disgust at the smell and appearance of medicine in her weak condition. I think it was a contributory cause, for the sight of a bottle with a label on it would cause violent retching and I was obliged to have the bottles of medicine kept out of her sight.

The treatment was symptomatic; hydrocyanic acid, cracked ice and counter-irritation for the nausea, and as the fever continued after the gastric symptoms had subsided, I gave her quinine to cinchonism, but without the least benefit; after that it was only given in tonic doses during convalescence. The rest of the treatment was small doses of mineral acids, or lemonade, laxatives occasionally when needed, large enemata and cold sponging. The fever gradually left and her convalescence was rapid and complete. The only definite and constant symptom in the case was the fever.

The next case was that of a farmer, aged 43, typically strong and healthy. He was taken with a slight chill, some loss of appetite, a little dizziness, slight aching in the head and back, a pulse of 100, and when I first saw him on the third day, a temperature of 102° . This condition of things lasted for three weeks, when his fever left and he recov-

ered rapidly. I could discover no lesion to account for it after a careful examination of every organ in his body.

This case bore most resemblance to a case of epidemic influenza, but the absence of bone pains, or any catarrh, together with the fact that there were no other cases of influenza in the neighborhood at that time, served to exclude it. The fever was the only constant symptom and that was so mild that it confined him to bed for only a small portion of the time. I might also add that all the distinctive symptoms of this so-called walking typhoid were absent.

The cause of this fever is not known. I have seen it follow fatigue, exposure to the sun, or to wet, errors in diet, drinking stagnant water, anxiety and mental overwork. Of course there is a disturbance of the heat centers, but what causes that disturbance is not yet known, whether it is due to a microbe, or as Da Costa suggests, to leucomaines, remains to be proved; it is rarely fatal anywhere and with us almost never.

The principal symptom is a continued fever. Generally there is loss of appetite, often constipation and of course fever urine. The percentage of deaths is very small. Dr. J. M. Da Costa, in an article on this subject in the *American Journal of the Medical Sciences* for June, 1896, says of the few post-mortems: "No lesions are found except congestion of internal organs. The spleen is not markedly enlarged; slight meningeal exudation has been occasionally noted. I know of no accurate blood examinations."

The diagnosis is by exclusion. Leaving out of the question hysterical fever, which we rarely see in this country, the continued fever which sometimes attends arterio-sclerosis and that which sometimes attacks lithemics, this fever is more likely to be mistaken for typhoid fever, malarial fever and epidemic influenza. I have also seen one case of acute miliary tuberculosis mistaken for continued fever.

I have heard it said in this Faculty and seen it stated in different medical journals, that many of the cases in country districts, that were diagnosed as

continued and malarial fever, were really typhoid, and that the diagnosis was due to the fact that physicians were unwilling to acknowledge the presence of typhoid in the vicinity. This certainly has not been the case with us, for until lately the tendency was to call everything typhoid. Whether the advent of the summer boarder would alter the case or not, I do not know. Just now it is more in vogue to call fevers that are hard to diagnose, malaria. I believe, however, that there is a distinct type of fever which is neither malarial nor typhoid and which in uncomplicated cases almost always ends in recovery, at least in this latitude. Further south in the United States it is occasionally fatal and in the tropics oftener so.

It is distinguished from a malarial fever in the absence of any regular or decided intermission by a microscopical examination of the blood and by the fact that antiperiodics have no effect on it whatever. From typhoid fever by the absence of all its distinctive symptoms, by its very low death rate and by the fact that there is very seldom more than one case in a family. From epidemic influenza it is diagnosed by the absence of any epidemic. It is neither contagious nor infectious; there are no bone pains and fever or very slight symptoms of catarrh of any of the organs.

There are cases of grippe, however, in which the catarrhal symptoms are confined to the stomach and intestines, which are hard to diagnose from continued fever.

The prognosis is almost always favorable. I have seen but one fatal case, and that was complicated with despondency. Twenty-five years ago, medical students heard a lecture on this disease, and the books on the practice of medicine written at that time all noticed continued fevers; within the last few years the subject has been discussed in some of the Southern medical societies; for a time, the subject seemed to be entirely lost sight of, and in more than one instance, both in medical societies and in journals, I have heard the idea that there was such a disease ridiculed.

More than once in my practice when a consultation decided that simple continued fever was a myth, I have reluctantly consented to having the patient dosed with antiperiodics, which answered no purpose but to make the patient more uncomfortable, or I have seen families uneasy as to the spread of typhoid and using every precaution, when I was certain the patient did not have typhoid.

When I am certain of my diagnosis, I treat these cases symptomatically with hydrocyanic acid, bismuth, cracked ice, etc., for nausea; acid drinks or an effervescing draught, large enemata, laxatives when necessary; baths, wet packs or cold sponging when the temperature rises too high. Antipyretics given to reduce the temperature or to shorten

the disease are not only useless but harmful; given in small doses frequently repeated, they relieve headache where that is a troublesome symptom. I prefer phenacetine in doses of from 2 to 4 grains.

The chief gains in making a correct diagnosis of this disease are to avoid useless medication and to save anxiety. Where the diagnosis is obscure it is often necessary to give a full dose of quinine tentatively, but harmful to continue it if it does no good. And now, when quite a number of our professional brethren believe that typhoid fever can be aborted or cured by purgatives and antiseptics, or by huge doses of antipyretics, it is surely a gain to humanity if we can conscientiously abstain from giving them.

THE CYSTOSCOPE IN DISEASES OF THE FEMALE BLADDER.

By J. M. Hundley, M.D.,

Associate Professor of Diseases of Women and Children, University of Maryland.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

HERETOFORE the treatment of no class of cases has been so unsatisfactory as diseases of the female bladder. Prior to the use of the cystoscope in these cases we had to be content to give drugs by the mouth and, in addition, in the severer cases, wash out the bladder with some solution. That is about all that was formerly done. It is true, for a number of years we have been able to inspect the urethra and limited areas of the bladder by means of the endoscope, but never as can now be done.

This newer cystoscope and the method of using it, the invention of Dr. H. A. Kelly, makes it possible to treat diseases of the female bladder with ease and precision. I am convinced by results already gotten by the use of the cystoscope, that the bladder is more frequently subject to organic disease than is usually believed, and that the various extrinsic causes thought to affect the bladder will greatly diminish in number

as our knowledge increases, as will also functional diseases of the organ.

It has been much too common a practice with us all when a woman applied for treatment of bladder symptoms, more or less prolonged, to immediately suggest as the cause uterine or ovarian disease, or some malposition of the uterus; when no disease of those organs were found, to conclude that the trouble was simply what is called "a nervous bladder." I do not find fault with this manner of procedure and I should further urge the importance of keeping in mind the part rectal diseases play in the production of irritable bladder.

What I wish to emphasize is the necessity of going a step further in making a cystoscopic examination in each case where any doubt exists. If this be made a routine practice we will be amply repaid by seeing many of these intractable bladder cases yield to treatment in a surprisingly short time, when

compared to the time consumed by the older methods. I wish now to ask your attention to the following cases. The first case shows very clearly the value of the cystoscope, especially in the treatment, which will be brought out fully in the history.

Mrs. C. consulted me about one year ago on account of frequent and painful micturition. At that time I obtained the following history: She was 35 years of age, married, no children or miscarriages. She menstruated regularly and without pain; no leucorrhea; her bowels moved regularly. In April, 1895, her first bladder symptoms appeared and at the same time a dragging pain in the left iliac region. She had been in excellent health up to April, 1895, except for an attack of scarlet fever in the winter of 1891, from which she fully recovered. She was exceedingly nervous when I saw her. She was referred to me by her attendant in the belief that her bladder symptoms and nervousness were due to some uterine or ovarian disease. It was thought that the left tube and ovary were at fault, as she developed pain in the left iliac region about the beginning of her bladder symptoms. When she consulted me she said her bladder trouble had progressively grown worse and that if she were on her feet for any length of time she was compelled to void her urine every fifteen or twenty minutes.

She had taken the usual remedies ordinarily given for irritable bladder without any relief whatever. Several examinations had been made of her urine with negative results. I made at this time a vaginal examination as well as I could without an anesthetic and found her pelvic organs free from any gross pathological lesion; her uterus, however, had descended in the pelvis somewhat, and feeling very sure that her symptoms being due most probably to a general nervous condition, more for the moral effect than any real good that would be accomplished, I introduced a ring pessary. In passing my finger into the left lateral fornix at the time of the vaginal examination, she evinced great pain. I could not make out that the

left ureter was enlarged and therefore ascribed the pain to ovarian tenderness. I prescribed at the time bromides for the nervous condition and hot vaginal douches for their known sedative effect upon the bladder.

I did not see my patient again until sometime in April of this year, an interval between her visits of about six months. At the second visit she said after leaving me in September, 1895, her bladder symptoms, nervousness and pain in the left iliac region did not improve, but grew worse. In December she first noticed blood in her urine, which sometimes appeared in clots, and again the urine was simply a very dark brown and was voided every fifteen or twenty minutes. She had to lie down most of the time and experienced constant pain over the region of the bladder, the pain frequently radiating down her legs and up into the lumbo-sacral region. Her nervous state was now very much worse than when she first visited me. Strange to say she did not void her urine more than three or four times during the night, while in the day it was every fifteen to twenty minutes. At this visit I strongly urged a cystoscopic examination of the bladder as I felt convinced the trouble was with the bladder and not due to some extrinsic cause. In the interval between her visits to me she had been persistently treated with oil of sandal wood, benzoate of ammonia, tonics, rest, etc.

She did not entertain the proposition to examine her bladder at this time and I saw her no more until the 10th of last August, when a cystoscopic examination was made of the bladder at her home. She was put in the knee-breast position and with a portable storage battery and an electric headlight, the entire interior of the bladder was carefully inspected through the cystoscope. Cocaine was applied to the urethra, which made the introduction of the cystoscope an almost painless procedure.

Our first impression while inspecting the bladder was that we had a papilloma to deal with from the dark color of the lesion, which lesion was situated on the lateral wall of the bladder about

three centimeters above the right ureteral opening. It was found, however, that the color was due to a large blood clot, which was easily removed with a cotton-wrapped probe. After removal of the blood clot an extensive ulcer was seen, irregular in outline and about one and a half centimeters long by about a half centimeter wide. It was a typical ulcer with shelving edges and a greyish necrotic base, which bled freely when touched. There was considerable edema of this area of the bladder more marked about the ureteral opening. There was a second ulcer not so deep or extensive as the first, situated on the anterior wall of the bladder in the median line about where the bladder and urethra merge into each other. It was somewhat difficult to bring this ulcer readily into view on account of the abrupt ballooning out of the bladder from the urethra. I forgot to say that her bladder had been washed out daily with a saturated solution of boric acid during the month of July without improvement in the bladder symptoms or decrease in the amount of blood in her urine.

The treatment pursued by us in the case consisted in making direct applications to the ulcers of a ten per cent. nitrate of silver solution every two or three days, with daily washing out of the bladder with a saturated solution of boric acid. The treatment was discontinued during the menstrual period, which lasted seven to ten days of each month. A twenty-five per cent. nitrate of silver solution was substituted for the weaker solution within a month, as improvement was not as rapid as we wished under the weaker solution. Washing out of the bladder with the boric acid solution was discontinued at this time. After each application of the nitrate of silver solution with the bladder free from urine about half an ounce of a ten per cent. ichthyol gelatine ointment was put into the bladder and ordered to be retained one hour.

From this time on there was marked improvement in the frequency of emptying the bladder. Where formerly urine was voided every fifteen to twenty min-

utes, the intervals between micturition increased to an hour, one and a half hours, two hours, two and a half hours, until now the urine can be retained three and a quarter hours with but little discomfort. The case is now about well. The smaller ulcer on the anterior wall of the bladder is well, and the larger ulcer is no longer excavated. Our patient is bright and cheerful, is no longer nervous and can spend an evening at the theater without discomfort from her bladder.

Early in the treatment of the case cover-glass preparations were made from the debris taken from the ulcers with the view of aiding us in arriving at some definite conclusion as to the cause of the bladder condition. Examination of the specimens showed mono- and polynuclear leucocytes, red blood corpuscles, bladder epithelium and a diplococcus occurring in pairs and clusters of fours. It was not satisfactorily determined what part the diplococcus played in the production of the ulcers. Tubercle bacilli were not found. Examination of the urine showed it to be acid.

Specific gravity 1025, a trace of albumen, no casts, pus cells, cocci free in the urine, bladder epithelium and red blood corpuscles.

The second case which I wish to report is of some interest from the standpoint of diagnosis. Last September I was asked to see, in consultation, Mrs. G., who had been passing large quantities of bloody urine since March. The blood was not constantly present in the urine; at one time she voided perfectly normal urine as to color, while the next time it would be almost pure blood. Her urine had been previously examined a number of times and nothing abnormal was found except red blood corpuscles. Frequency of urination varied from day to day. Some days she voided urine every half hour. Again she would go for twelve hours without being able to pass it, though suffering pain and having the greatest desire to do so. She had to be catheterized when these attacks of retention of urine came on before being relieved. This patient had lost a great deal of blood

from March to September, when I saw her. She had been most of that time in bed and she looked very anemic and had difficult breathing upon the slightest exertion. She did not seem to suffer any pain in the region of the bladder or kidney. Her blood was examined for malarial organisms as well as for the *filaria sanguinis hominis* with negative results.

Cystoscopic examination was made of her bladder with the view of determining whether this blood in her urine came from some growth in the bladder, or from the kidney. Upon examination the mucous membrane of the bladder was pale, very much paler than in health, and there was not a congested spot or anything abnormal found in the bladder. The case then resolved itself into one of hematuria, due doubtless to some blood dyscrasia. To have been able to state with positiveness the condition of the bladder in this case was of the greatest value and shows a great advance over older methods.

Other cases attesting the value of the cystoscope in this line of work could be added to those herein reported, but I think sufficient has been said to substantiate the claims set forth.

Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

SEMI-ANNUAL MEETING HELD AT HAGERSTOWN, MD.,
TUESDAY AND WEDNESDAY, NOVEMBER
10 AND 11, 1896.

TUESDAY, NOVEMBER 10, FIRST DAY.

THE President, Dr. Wm. Osler, in the chair and Drs. John S. Fulton and H. O. Reik, Secretaries. Dr. J. W. Humrichouse, President of the Washington County Medical Association, then delivered the address of welcome as follows :

"Gentlemen of the Medical and Chirurgical Faculty, we welcome you again to Hagerstown.

"It is an honor we appreciate to have the Medical and Chirurgical Faculty of Maryland with us.

"A hundred years of existence have

invested it with dignity. For almost a century inspired by the most worthy men of the profession it has been a powerful agent for the advancement and diffusion of medical learning and for the instilling and cultivation in medical men of lofty ideas regarding their most ancient calling today. It comes to us with men of the University of Maryland, of the Johns Hopkins, the Baltimore Medical College, the College of Physicians and Surgeons, with men of all the hospitals and schools of the State, and invites us to partake of the influences it has so long represented.

"We recall with pleasure the first visit in November, 1889, of the State Society in Hagerstown. One of the results of that meeting was the reorganization of our County Medical Society, which now numbers about 35 active members, who assemble quarterly to read and discuss papers and to become better acquainted with each other.

"Another result we are glad to know was the encouragement it gave the Faculty to meet in other towns of the State.

"Now the medical profession of the whole State is interested in the object and aims of the State Society. The county member is no longer isolated, no longer left to himself, to become narrow-minded, but in touch with the spirit which animates this organization of which he has become a part.

Dr. William Osler, the President, responded on behalf of the Faculty. We are only too delighted to meet here among you. I think that one of the most immediate and pressing needs of the ancient and honorable Faculty of Maryland is that the members throughout the State at large shall take a greater interest than they do in the affairs of this institution. I have had the pleasure of being a member of the State Society in Pennsylvania and of similar societies in Canada, and I am impressed with the idea that the members of this State have not taken as much interest in the affairs of their society as they should. The Faculty belongs to the physicians of the State and not alone to the profession of Baltimore. There is now a membership of 475, and of these

139 are members from the State at large and 336 from the city of Baltimore. There are 761 regular practitioners in the State outside of Baltimore, so you see the proportion of members is not a proper one. There are about 1000 physicians in the city of Baltimore, of whom 336 are members of the State Faculty. The proportion in the city, as you see, is considerably larger.

As many of you know, the Faculty has within the past two years taken a new lease on life, and we have now our own property, a very nice hall and a good library, which is increasing very rapidly. We have had some large bequests lately, and the members of the Faculty can now find in our library almost any periodical in any language, and, in fact, we have the third or fourth largest list of current medical literature in the country. Owing to the kindness of the Frick family we have a beautiful reading room, superbly furnished, and all of the new books in the department of medicine which Dr. Frick represented. I hope that at an early day we shall be able to give the county members of the Faculty equal advantages with the city members in procuring the use of these books. For instance, if one of you should want a book, I hope that arrangements may be so made that you can telegraph our librarian for it and have it sent out at once. There is no reason why you should not have the privilege of using the books in that way.

Your attention might be called also to the nurses' directory. We hope you will take an active interest in that, and when a nurse is wanted telegraph for one to the library, where a list is kept and where they can be obtained at the earliest possible moment.

Dr. C. Birnie of Taneytown then read a paper on CONTINUED FEVERS. (See page 132.)

Dr. J. C. Hemmeyer: I would like to ask Dr. Birnie what he thinks of the so-called gastric fevers. I have met a number of people that believe in them. It seems to be a fever that does not resemble the well-known exanthemata, and the organism, if there is one, is confined possibly in the blood.

Dr. Birnie: So far as a microscopical examination of this fever is concerned I think there is no history whatever of it. I have not been able to find any. I could only examine my own private library, however. Gastric fever I have always thought was a form of gastric catarrh. The fever of which I am speaking you could hardly call gastric fever because the symptoms that usually occur in disturbances of the gastric organ are here almost nil.

Dr. William Osler: I have no personal knowledge of gastric fever.

Dr. Charles M. Ellis of Elkton: I have recently had similar experiences to Dr. Birnie's, and my conclusions are that the continued fevers have some connection with sthenic fever. A case in instance was that of a lady who while traveling from New Orleans to Elkton, was taken sick on the way. It was excessively hot, the temperature in the cars averaging from 85° to 90°. She was taken with a chill on the train before arriving at Elkton. She had no epistaxis or coughing, but had a regular diurnal rise and fall of temperature and some gastric symptoms. There was no enlargement of the spleen and no evidence of typhoid fever. I think her trouble was the result of exposure to the intense heat, for I have had several similar cases that seem to have their origin in such prolonged exposure.

Dr. A. S. Mason of Hagerstown: Such cases as have been spoken of have come under the observation of most practitioners of medicine. I recall so many of them that I consider it hardly necessary to mention any individual case. The fact seems to be established that quinine relieves all malarial troubles. Now, how can you classify those cases that can be excluded from the type of typhoid fever and yet give no answer to the preparation of bark? Many of these cases have come under my observation in the last forty years and quinine has been used for them even in large doses without any benefit. I recall two cases contracted some years ago upon the coast of Florida. They lasted from four to six weeks and quinine did not seem to affect them. One

of the patients was a lady who now resides in this town. In neither case was there any local lesion. During the present week I have seen a similar case in a child. It simply had a protracted fever which had lasted for four weeks and then subsided. In this case there was no lesion and again quinine had no effect. You all recall an epidemic in this city ten or twelve years ago, when it was said that we were having malaria all along the coast. We had typhoid at the time, caused by pollution of our drinking water, but any number of the cases we saw then had none of the characteristics of typhoid and after running a course of four or five weeks subsided. I would like to know how to classify such fevers.

Dr. Geo. J. Preston: The discussion of the diagnosis of irregular fevers is certainly of very great importance. Of course our whole knowledge of fevers as yet needs to have a great deal of light shed upon it.

When we go back to the physiological explanation of fever and attempt to balance the heat production with the heat loss we see how ill-balanced they are. Even our knowledge of thermic centers is very far from being exact. We know of certain centers in the medulla, in the basal ganglia and possibly higher up. I sometimes think we do not give due weight to the physiological aspect of the question.

The question of fevers due directly to some psychic stimulation is of importance. There is no doubt that we do have some hysterical fevers; that is accepted by neurologists, and there is in these cases a distinct rise in temperature. The diagnosis of such cases is, of course, almost impossible. Fortunately we rarely meet with them. We frequently have typhoids that run a somewhat similar course to that described by Dr. Birnie, and are called occasionally walking typhoids. They run for three or four weeks. The temperature rises slowly, there may be no tympanites and no eruption noticeable, but by the end of three weeks a relapse comes as a clinch to our diagnosis. The enlargement of the spleen and liver is not

diagnosed, and the diazo-reaction has not in my hands proven of great value. It is to be borne in mind that we have cases of malaria, in the city at least, where quinine seems to give no benefit. There is always a fluctuation, of course, but I have seen these cases run for several weeks resisting quinine.

Correspondence.

TEMPERANCE AND BRIGHT'S DISEASE.

BALTIMORE, November 30, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Apropos of your editorial last week—*Plures crapula quam gladius!* Rather, much rather, would I be a steady drinker (say one bottle of beer and a glass of whiskey daily) with a moderate appetite than a teetotaler with a large one. Over-eating is as much a cause of degeneration of arteries and of kidneys as over-drinking. Harris, the caterer, will tell you that for a temperance dinner or supper much more food is provided than at a rational, Cana-in-Galilee-like, feast at which wines are served. There is death in pot and cup alike. *Ab intempestivis commensationibus*—to quote the immortal Burton.

Yours very truly,

CRATINUS.

A CORRECTION.

ROCKVILLE, November 30, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Please make the following corrections in your next issue, as without them my piece would lack merit. Instead of "I gave seven and a half grains of salicylate of sodium in a teaspoonful of essence of peppermint," it should read "essence of pepsin," and where it reads "a sixtieth of a grain of strychnine, hypodermically, during the remaining period of his illness," it should read "a sixtieth of a grain of strychnia, hypodermically, every four hours during the remaining period of his illness, as also the fluid extract of digitalis." Yours very truly,

EDWARD ANDERSON, M. D.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, DECEMBER 5, 1896.

THE usual effects of properly applied exercise not only produce a sense of exhilaration and a feeling of well-being but when conducted along certain lines and governed by scientific principles it brings about certain remote and permanent effects. In the Bible it is asked who can by taking thought add one cubit to his stature.

Surgeon Henry G. Beyer of the United States Navy has given the subject considerable thought and he thinks he has added markedly to the stature of many cadets who took exercise according to his directions. His careful and practical article in the *Journal of Experimental Medicine* shows how systematic exercise adds not only to the height, but to the weight and strength.

He first studied the normal growth tables from the sixth to the twenty-second year. These tables were obtained from various and reliable sources. He then began the task of measuring each cadet passing under his care

and he recorded the comparative measurements on entrance, during a carefully graded course of exercise and at the end of this period. His results are not only valuable but the manner in which he so intelligently uses his statistics is extremely praiseworthy. He found the most rapid growth between the fifteenth and twenty-first year to be in the fifteenth and next in the sixteenth year. Between sixteen and twenty years he found that properly administered gymnastic exercise showed an increase in height above the normal growth of 26.6 millimeters, or a little more than one inch. If the height is increased it follows naturally that in the large majority the weight and the strength are also increased.

Height is the most important consideration in this kind of investigation because any agent influencing growth in height in man influences growth in bone. Growth practically ceases at twenty-one while increase in weight and strength may be obtained almost indefinitely. The increase in strength from this kind of exercise was almost marvelous and he is inclined to think that almost any healthy young man can become a "phenomenal giant" if he exercise systematically and regularly.

The kind of exercise needed is not that which will alone increase the weight and strength, but also that which will increase the height, and then the other form of increase will follow as a matter of course.

This work of Dr. Beyer is especially interesting as showing why the young child should not be allowed to "just grow up" like Topsy, but should be given a systematic and regular course of training as laid down by this writer so that a race of strong and tall men may have the opportunity to marry and bring into the world strong and healthy offspring to counteract the many degenerating and enervating effects of the style of living of the present day.

THE simpler diseases rarely excite the interest of physicians; indeed such troubles as acute rhinitis are so familiar that they breed contempt in the opinion of Dr.

Curing a Cold.

Henry J. Mulford, in the *American Medico-Surgical Bulletin*.

He has tried such old remedies as Dover's powders, full doses of quinine, the Turkish

bath, and all in his opinion are of no avail. He recites a number of cases to show that routine treatment is of little use and he endeavors to educate physicians to treat such apparently trifling disorders intelligently.

Two classes of persons are especially prone to colds. One is the patient subject to a diathesis and the other is the individual who persistently bundles and wraps himself up so that the slightest draft is dangerous. The first idea of treatment is to start the organs to functioning and clear effete matters from the circulation. This can best be done with calomel or podophyllin.

The diathesis must be overcome and the coddling patient must wear sensible clothing. Rubbers, which sweat the feet and cause a feeling of cold and clamminess, should not be worn. The patient and his nose must both be carefully examined and the treatment suited to each case.

Dr. Mulford has evidently studied his subject and has had no small experience in curing colds. It is refreshing to see the question handled in such an intelligent manner. The treatment of such simple troubles as colds is usually handed from one to another and there are few persons who have not on tap some sure remedy for colds, a remedy which they willingly pass to their friends and which they claim as a specific. Such judgment is, of course, based on a small experience by a mind uneducated in medicine.

The best way to cure a cold is not to have it; that is, so to train the body that when there is loss of heat, the heat-producing centers will rush to the rescue and make up for what is lacking and thus restore the equilibrium. It is astonishing how much heat can be extracted from the body by cold, wet feet, because, of course, the feet are usually the point of contact between the body and the ground.

Besides the avoiding of coddling and inhabiting rooms overheated with fires made by the heat-loving negro, the body should go through a course of hardening by cold douche baths which could be taken by those who can stand them throughout the winter. Exercise should be liberal, and good, strong food should be taken. The healthy individual takes a cold only when unusual conditions prevail and usually escapes chilling where the ordinary person would succumb.

THE Frick Library of the Medical and Chirurgical Faculty of Maryland will be formally dedicated next Thurs-

The Frick Library day night, December 10, *Dedication.* with appropriate ceremonies. With an untiring energy characteristic of a few members and officers of the Faculty, this memorial library has been added to the valuable facilities of the Faculty and the committee announces that the library will be formally opened to the members next week.

Dr. Samuel C. Chew, a life-long friend of the late Dr. Charles Frick, will deliver the principal address, reviewing his life. Mr. Reverdy Johnson, an old friend of Dr. Frick, will also be present and make a few remarks. Brief addresses may also be expected from Dr. J. M. DaCosta, President of the College of Physicians of Philadelphia, and by Dr. Joseph D. Bryant, President of the New York Academy of Medicine. After these ceremonies, which will not be long, a collation will be served.

This will certainly be a memorable event in the life of the Faculty, and the generous example of the Frick family may serve to stimulate citizens to leave some similar testimonial of their regard for the medical profession.

Formal invitations will be sent out to all members of the Faculty and all members from the city and State will be welcome.

It is a source of congratulation to note that the Health Department of Baltimore, acting on the hint conveyed in *Typhoid Diagnosis.* the last issue of the MARYLAND MEDICAL JOURNAL, will now arrange to have glass slides left at convenient stations in Baltimore so that physicians may leave the blood of suspected typhoid cases for diagnosis by the bacteriologist of the Health Department.

As this advance has been taken up as yet by very few health boards it is a great credit to the Health Department of Baltimore that such facilities are offered to the profession.

The value of this method need not again be emphasized. It is almost too early to predict what the effects of an early diagnosis will have on the mortality of this dreaded disease, but the step is a proper one and cannot but receive the approbation of the profession and the public.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending November 28, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		16
Phthisis Pulmonalis.....		22
Measles.....		
Whooping Cough.....	6	
Pseudo-membranous Croup and Diphtheria. }	22	4
Mumps.....	1	
Scarlet fever.....	25	
Variceloid.....		
Varicella.....	2	
Typhoid fever.....	15	4

Bay View Hospital now has trained nurses.

Dr. George Harley of London died in October, aged 67.

Behring and Knorr report success with a tetanus antitoxine.

The Clinical Laboratory of the Johns Hopkins Hospital was opened last Monday. The children's ward will be opened later.

The New York Board of Health has under consideration the banishing of dogs from the streets. This is no small undertaking.

Diphtheria is reported to be prevalent in Powellsville, a small town near Salisbury, Wicomico County, Maryland. Dr. Fulton is investigating.

Dr. Edmund Lesser of Berne has been called to Berlin to succeed the late Dr. Lewin, the eminent dermatologist whose death took place recently.

The Anglo-American Continental Medical Society met last month in Paris. Dr. Halstead Boyland, formerly of Baltimore, is an active member.

The New Orleans University Medical School has in contemplation a plan for establishing a training school for negroes. The suggestion has received cordial support, and there are good reasons for believing that the undertaking will succeed.

The Hartford Medical Society celebrated the fiftieth anniversary of its existence in that city, October 27, 1896. The meeting was

largely attended and many interesting papers were read. Dr. Gurdon W. Russell delivered the historical address.

At the last regular meeting of the Folk-Lore Society of Baltimore, Dr. Charles C. Bombaugh read a very interesting and scholarly paper on "Medical Superstitions," which was discussed by Dr. Henry M. Hurd of the Johns Hopkins Hospital and others.

Dr. Nicholas W. Kneass, who died last week at his home on North Charles Street, Baltimore, was a homeopathic physician of wide note and was greatly beloved by his friends and patients. He was a graduate of the Hahnemannian Medical College of Philadelphia.

Plans have been filed at the Department of Buildings of New York City for additional buildings to be erected in connection with Bellevue Hospital, at an estimated cost of \$130,000. A water-tower is also to be built west of the City Hospital on Blackwell's Island.

Dr. Hunter Robb, who was formerly connected with the Johns Hopkins Hospital, has among other positions become a collaborator of the *Cleveland Medical Gazette*, which makes its appearance this month in a new dress and is now owned by a stock company of physicians.

San Francisco has opened four food inspection stations, much like the *octroi* of foreign cities. Here every wagon bringing in food products of any kind is stopped and inspected and stamped if passed. This does not apply to the markets. It is an excellent plan and cost that city \$10,000.

Portsmouth, Ohio, physicians have adopted a resolution which requires all delinquent patrons to pay in advance for professional services. A common list for use of all society members has been prepared. Let the good work go right along. Symptoms of the contagions influence are to be treated phlogistically.

The death of Rokitansky, the Viennese opera singer, at the age of sixty, and son of the celebrated Austrian pathologist, who also had a son a physician, recalls the answer given by Rokitansky, Sr., when asked what his sons did. He said: "*Der eine heilt und der andere heult*," i. e., "One heals and the other howls."

Book Reviews.

THE STUDENT'S MEDICAL DICTIONARY. Including all the the Words and Phrases Generally Used in Medicine, with their Proper Pronunciation and Definitions. Based on Recent Medical Literature. By George M. Gould, M. D., A. M., etc. With Elaborate Tables of the Bacilli, Micrococci, Leucomaines, Ptomaines, etc.; of the Arteries, Ganglia, Muscles and Nerves; of Weights and Measures. Analyses of the Waters of the Mineral Springs of the United States, etc. Tenth Edition, rewritten and enlarged. Philadelphia: P. Blakiston, Son & Co., 1896. Pp. xii—17 to 701. Price, \$3.25.

Although this is called a new edition, it is in reality a new dictionary entirely, as the plates of the old one have been destroyed. Dr. Gould has been very successful as a dictionary writer and in spite of certain peculiarities of spelling which no human power could induce him to change, he has written the best medical dictionary that has ever appeared. It does not contain the illustrations like the larger one, but the more commonly used words are included. This book has had an enormous sale and deserves its popularity. The pronunciation of doubtful words is given. It is unnecessary to add that the publishers' work is up to the usual high standard.

MANUAL OF PHARMACOLOGY AND THERAPEUTICS. By William Murrell, M. D., F. R. C. P., Physician and Lecturer on Pharmacology and Therapeutics at the Westminster Hospital, etc. Revised by Frederick A. Castle, M. D., Member of the Committee for Revision and Publication of the Pharmacopoeia of the United States of America, etc. New York: William Wood & Co., 1896. Pp. 516; Octavo.

This work of Murrell has been revised by Dr. Castle and arranged for the American reader. Additional matter on climate and natural mineral waters has been added from other authors. The lectures of Dr. Murrell at Westminster Hospital have been abstracted and rearranged by the American editor. He gives a comprehensive definition of therapeutics and an interesting chronological history of the subject which is divided into such sections as: Sources of medicine, adulteration of drugs, the study of *materia medica*, pharmacological investigations, physiological actions, idiosyncrasy, tolerance and habit, accumulations, incompatibility and antagonisms, active principles and serum therapeutics.

Current Editorial Comment.

DISPENSARY ABUSE.

The Clinical Chronicle.

I FULLY believe the physician's abuse of the dispensary is greater than the patient's abuse of it. No doubt, there are numbers of physicians who utilize the dispensary as a means of enlarging their office practice. This is wrong from principle.

MEDICAL MEETINGS.

American Medico-Surgical Bulletin.

It appears to us that physicians could employ their time more profitably than attending many of the medical meetings which occur. No worthy object is gained by reading or discussing papers which contain nothing new, and which in general may be found more succinctly stated in standard text-books. How much wider our knowledge, how much broader our culture, how much better doctors we would be, if instead of forever hobnobbing together on time-worn themes, we should devote these hours to literary kings and queens, or to little journeys into the territory of neighboring sciences.

HOSPITAL ABUSE.

Lancet.

THERE can be little doubt that the subject of hospital abuse is one of the greatest interest to the profession and that the profession is mainly responsible for the evils complained of. We cannot go so far as to acquit the subscribers to hospitals who supply letters of admission or out-patient letters promiscuously to all who ask for them. The responsibility of the profession depends on this circumstance, that hospitals are essentially medical institutions. The whole machinery and purpose of them are medical. The staff of the hospital, so to speak, is the *deus ex machina*. Take that away and the hospital has no ground of appeal to the charitable public. The services of the staff are gratuitous, and surely the very least its members can be expected to demand as a condition of their services is that there shall be no abuse of the charity they administer, and that it be not spent on persons who can afford to meet their own medical wants, who live in houses of £100 (\$500) a year rental, or buy farms worth £10,000, (\$50,000) or can afford to pay £40, (\$200) for an operation, or who have an annual income of £4000 (\$20,000).

Publishers' Department.

Convention Calendar.

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30
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DECEMBER						
S	M	T	W	T	F	S
..	..	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31
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State Societies.

NOVEMBER.

27. NEW YORK STATE ASSOCIATION OF RAILWAY SURGEONS, at New York City. C. B. Henich, M. D., Secretary, Troy.

DECEMBER.

1. LYCOMING COUNTY (PA.), at Williamsport, Pa.
3. TRI-STATE, of Western Maryland, Western Pennsylvania and West Virginia, at Cumberland, Md.

National Societies.

NOVEMBER.

10. SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION, at Nashville. W. E. B. Davis, M. D., Secretary, Birmingham, Ala.
16-19. PAN-AMERICAN MEDICAL CONGRESS, at City of Mexico, Mexico.

DECEMBER.

- 30-31. WESTERN SURGICAL AND GYNECOLOGICAL ASSOCIATION. Herman E. Pearse, M. D., Secretary, Kansas City, Mo.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SEE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

THE State Board of Health of New York has asked for sufficient funds to employ a chemist to regularly examine and report on the beer product of that State, it being charged that beer as now manufactured is largely adulterated. The subject is creating considerable agitation between the manufacturers and the promoters of the movement. The Bartholomay Brewing Company, whose Baltimore manager is Mr. George C. Sucro, publish in connection with their advertisement the result of an analysis of their product by a professor of chemistry, expressed in percentages by weight, thus assuring all physicians who prescribe Bartholomay Beer that nothing enters into composition but malt, hops, yeast and water, and is entirely free from adulteration.

MACEY, CREAIGHEAD CO., ARK.,

July 12, 1895.

JNO. B. DANIEL, Atlanta, Ga.

Dear Sir:—The Passiflora Incarnata you shipped me on June 7 reached me direct. I have tried it in several cases where I thought it was indicated. It has given thorough satisfaction. Please duplicate my order at once, and oblige,

Yours fraternally,

J. L. GIST, M. D.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery.

VOL. XXXVI.—No. 9. BALTIMORE, DECEMBER 12, 1896. WHOLE NO. 820

Original Articles.

'REMARKS ON THE PATHOLOGY AND BACTERIOLOGY OF TYPHOID FEVER.

By Simon Flexner, M. D.,

Associate Professor of Pathology, Johns Hopkins University.

REMARKS MADE AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

I HAVE the privilege of bringing before you this evening a series of specimens and preparations illustrating some of the more salient and important features of typhoid fever. This demonstration probably will not be entirely new to many of you, for the reason that typhoid fever, which is so constantly with us in Maryland, is a disease not without many victims and the anatomical lesions of it are therefore too often accessible to observation. The particular feature, however, which may be urged for the present collection of anatomical specimens is its completeness, so that you will have an opportunity of observing, as well as can be shown in spirit preparations, all stages in the development of the pathological lesions of typhoid fever in the intestinal tract from the earliest swelling in the lymphoid nodules to the finished ulcerations.

Among these preparations you will find examples of those accidents with which you are so familiar but the consequences of which are so serious, namely, erosion by ulceration of the larger blood vessels in the intestine and the perforation of the peritoneal cavity. Such a series of conditions as is here presented suggests a certain sequence and order in the development of the pathological

lesions of the disease, and, as you well know, we endeavor to make out such a course in our pathological studies and bring into more or less agreement the clinical phenomena of the various stages of the disease; and this makes it possible for us to tell at the autopsy table whether or not in the course of the disease there has been a re-invasion or relapse quite as much as in the clinical observation of the case. Examples illustrating this condition in which you will observe side by side with the freshest lesions of the disease, lesions of a much more advanced character, are also here for your inspection.

I wish also to bring before you a variety of cultures showing the growth of the typhoid bacillus upon various culture media. The typhoid bacillus unfortunately for us is a microorganism which manages to subsist and even to increase upon the greatest variety of nourishing substances and even under conditions in which very little nutriment is present. It is capable of living for a time in distilled water, although very fortunately for us it is powerless to resist for any considerable time the encroachments of saprophytic bacteria as they occur ordinarily in nature. The typhoid organism is capable of

growing upon many of our ordinary vegetables, such as the white and sweet potato, the turnip and parsnip, and for the most part in an invisible manner. It also finds in milk a most excellent culture medium and is capable of increasing in this fluid to the greatest and most dangerous extent without altering in any way the character of this fluid.

The typhoid bacillus does not cause the curdling of the milk nor does it modify perceptibly its taste; so that anyone probably would not refuse a sample in which many thousands of these microorganisms were contained. The growth of this organism is a very rapid one, twenty-four hours sufficing for a very great increase, so that from a few individuals, or indeed a single individual, after the lapse of this time many millions of progeny can be produced. While not so resistant as some microorganisms to injurious external influences such as desiccation, yet it even withstands complete drying for some time (up to 80 or 90 days), and as has been shown by Prudden, it is not killed by freezing and may survive in ice for many months.

The causative relation of the typhoid bacillus to the disease typhoid fever must, we think, be considered as proven, although the experimental production of the disease has not been successfully carried out, doubtless for the reason that the lower animals are not susceptible to it. The relation of the bacilli to the pathological process is a very direct and intimate one.

We find the peculiar microorganisms in association with the intestinal lesion, but not limited to these; they are also present in the internal organs such as the spleen, liver and the kidneys, and more rarely have been found in the blood itself. A part, at least, of the constitutional symptoms of the disease must therefore be credited to these foci of microorganisms outside of the intestinal tract, instead of referring them, as has been done, exclusively to the absorption of poisonous products from the intestinal canal.

Recent studies have shown us that the inflammation associated with bone and cartilage which not uncommonly

succeed typhoid fever are due to the typhoid germ itself. This fact becomes more easily comprehensible since the observations of Quincke and his pupils upon the common occurrence in typhoid fever of the typhoid organisms in the bone marrow. Under some circumstances, not as yet sufficiently understood, an acute osteomyelitis caused by the typhoid bacilli leads to destruction of the hard bony parts and to suppuration. In these foci the bacilli may retain their vitality for a very long period. In one case which has been reported they were found alive in the suppurating sinus seven years after the disease (Buschke).

The isolation of the typhoid bacilli from the internal organs in typhoid fever offers no especial difficulties, but it is far less easy to obtain them from the dejecta during disease. Although this may appear paradoxical it is easily understood when it is considered that the dejecta harbor many other microorganisms, and many of these grow more vigorously than the typhoid organism itself, so that the latter may be easily overgrown. Notwithstanding this fact, painstaking investigators have succeeded by the use of ordinary culture methods in obtaining the typhoid bacilli from the excreta. Through the introduction of an improved method by Elsner this fact is rendered relatively easy of accomplishment. He has taken advantage of the fact that in an acid medium the ordinary intestinal bacteria (colon group) grow more vigorously than the typhoid organisms, and under these circumstances the differences of the colony growths are sufficiently great to enable the practiced eye to select with precision one from the other. Since the introduction of this method the typhoid bacilli have been isolated in many cases from the intestinal contents where they have been missed before; and it may be hoped that as such, or in a more or less modified form, it may be applied to the detection of the typhoid bacillus in contaminated surface waters, milk and other suspicious sources of typhoid infection.

A very significant advance has just

been made in regard to the diagnosis of typhoid fever proceeding on the basis of the cholera reaction of Pfeiffer, which, you may recall, was introduced for the purpose of discriminating between the cholera vibrio and certain allied bacterial forms. Pfeiffer found that the blood of an animal immunized to the cholera germ, when mixed with a culture of this germ and introduced into the peritoneal cavity of a guinea pig, caused a rapid dissolution of the introduced microorganisms, and was without effect on others, although closely allied species. The same effect can be produced with various other bacilli such as the typhoid bacillus, colon bacillus, etc., provided the blood serum of an animal rendered immune to each of these bacterial forms be substituted for the cholera serum. Thus it was shown that the action of the immunized serum is specific for a particular kind of bacterial protoplasm, and the reaction can therefore be used to distinguish one form from another, even when these resemble each other so closely as do the colon and typhoid bacilli. What happens in animals exposed to experimental infection takes place in the fluids of the body in human beings in the course of certain natural diseases. Persons suffering from typhoid fever soon show evidences of the presence of immunizing substances in their blood, and these substances increase during the progress of the disease.

It seems very natural then to utilize the blood of persons, supposed to be suffering from typhoid fever, for the purpose of demonstrating this peculiar affinity for the typhoid bacillus. As healthy human blood shows little or none of this activity, if the blood of persons supposed to be suffering from typhoid fever shows a great activity, it may, *a priori*, be assumed that such immunizing substances are present or are being increased.

Proceeding upon this idea, Widal, and after him Grünbaum, suggested that in doubtful cases of typhoid fever the blood may be utilized for the purpose of diagnosis. It is necessary merely to obtain a small amount, a drop or two in

a dried form being sufficient, to moisten this with water, to add a suspension of the typhoid bacilli and to observe under the microscope what takes place. If the introduced organisms lose their motility and begin in a few minutes to run together, forming "clumps" or "agglutinates," it is safe to assume, as far as we are at present informed, that the disease is typhoid fever. This reaction has been obtained as early as the third or fourth day of the disease and as late as the ninetieth and bids fair to be fairly constant. It further permits of being quickly made and does not require the use of an animal experiment, but presupposes merely the use of a pure culture of the typhoid bacillus and some experience with the behavior of bacteria in general. It has grown out of the Pfeiffer reaction for the cholera vibrio but it differs from this in dispensing with an animal for the experiment, and can be made in a test tube or on a hollowed slide under the microscope; in it the bacilli do not proceed to disintegration, but merely to agglutination.

It does not need me to remind you that we have more than sufficient evidence of the infectious character of typhoid fever, nor that its germs are carried from a small focus to a constantly widening area through food or drinking water. There are many observations recorded in this and other countries which render more than probable this mode of infection; we need only the demonstration of the distribution of the typhoid germ in infected districts in a manner similar to what has been done lately for the cholera germ during the prevalence of Asiatic cholera in order to make the chain of evidence complete. This we may fairly hope the newer methods of isolating the typhoid bacillus may enable us to do.

In conclusion it may be permitted that I quote some remarks upon two famous investigations into the causes of outbreaks of typhoid fever, which are given by Professor Tyndall, who says: In observational medicine one fine piece of work may be here referred to—the masterly inquiry of Dr. Thorne Thorne into the outbreak of typhoid fever at Cater-

ham and Redhill. Hundreds were smitten by this epidemic, and many died. The qualities of mind illustrated in Dr. Thorne's inquiry match those displayed by William Budd in his memorable investigation of a similar outbreak in Devonshire. Dr. Budd's process was centrifugal — tracing from a single case

in the village of North Tawton the ravages of the fever far and wide. Dr. Thorne's process was centripetal — tracing the epidemic backwards from the multitude of cases first presented, to the single individual whose infected excreta, poured into the well at Caterham, were the cause of all.

THE EARLY SYMPTOMS OF GENERAL PARESIS.

By George H. Rohé, M. D.,
Baltimore.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

THE increasing frequency of general paralysis of the insane and the absolutely hopeless prognosis of the fully established disease render a knowledge of its earlier symptoms of the greatest importance. Although experience does not warrant us in looking for much encouragement from the results of treatment in even the earliest stages of this fatal disease, nevertheless if we may anticipate good results from treatment at any stage, it would naturally be at a time when the physical alterations in the brain have not advanced very far.

There is no single symptom that can be looked upon as diagnostic of general paresis even in the advanced stages. The diagnosis must be made from a study of certain concomitant manifestations, partly psychical and partly physical. Of the latter, the motor disturbances are, as the various names given to the disease indicate, the most characteristic.

General paresis, paretic dementia, general paralysis of the insane, is a disease of the middle period of life, rarely beginning before the thirty-fifth and still more rarely after the fiftieth year of life. It attacks by preference persons in the higher walks of life, but among these is found especially among such as have more or less irregular habits. Syphilis is regarded by most authorities as a cause in a large proportion of cases, but the disease does not attack exclusively individuals who have been subjects of

syphilitic infection. Mental stress, especially when associated with intemperance, venereal excesses, or other irregular habits, are often found as precedent conditions and may perhaps be regarded as etiological factors. It is more frequent in cities than in country districts. Men suffer from the disease from three to five times as often as women. Clergymen are almost exempt, while actors and military men are frequently attacked.

Among the early psychic symptoms are irritability and especially an instability of the mental character. The individual is easily disturbed, emotional, variable in moods. His memory, especially for recent occurrences, becomes defective. The moral sense is often perverted. The individual loses that delicate sense of propriety by which his previous life has been guided. He becomes unconventional, consorts with drunkards and lewd females, makes indecent proposals to respectable women of his acquaintance, indulges in a latitude of speech and action not tolerated by the conventions of the society to which he belongs; all this without recognizing any impropriety in it. He may make a merit of his sociological study of the nude and his compounding with liars and perjurers. Later there may be depressive mental states; the patient may be hypochondriacal or melancholic and governed by depressive delusions.

Even delusions of persecution may be present. These are, however, generally attended by expansive delusions, as in a case under my observation two years ago. This patient, who may, in the modern vernacular, be designated as an "all around sport," had early delusions of persecution. His motor symptoms were so nearly those of locomotor ataxy that he was pronounced a subject of that disease in one of the neurological clinics of Baltimore.

I saw him first in one of the general hospitals in the city and the only psychical derangement I could elicit on close examination was a delusion of persecution on account of some money affairs, but he could give no clear account of why he should be persecuted. He had marked atactic gait and halting speech, but gave expression to no expansive delusions. He was removed to the Maryland Hospital for the Insane and repeatedly examined with the greatest care. Suspecting preceding syphilitic infection I stripped him, but could find no evidence of primary lesion. There were no enlarged glands. The patellar reflex was entirely abolished. Late one night, hearing a disturbance upon the ward, I went to his room and found the attendants endeavoring to quiet him. He presented the most exquisite example of terror and alarm I ever witnessed. His agitation was extreme. After a little I succeeded in quieting him somewhat and then asked him why he was so frightened. He answered in his scanning speech: "If somebody pressed the muzzle of a loaded gun to your head you'd be frightened too." I said that was very likely, but saw no reason why anyone wanted to shoot him. He looked at me suspiciously for a moment and explained: "I have a thousand millions of dollars in this house and they want to take it away from me." It was the first evidence of expansive delusions that he had shown during his illness. He rapidly went to pieces after this and died two months later, with the most marked symptoms of parietic dementia.

At the post-mortem examination, three cicatrices, probably relics of syph-

ilitic gummata, were found in the liver. The brain presented the usual macroscopic signs of general paresis, but no gross lesions, indicating syphilitic infiltrations, were found.

The expansive delusions or "delusions of grandeur" are so marked a characteristic of the so-called "classical" general paresis, that they are regarded by many as pathognomonic and essential. This is not the case. In many instances, and more particularly in the earlier stages of the disease, there are symptoms of mental depression. Even depressive delusions may be present. In one case under my observation, the depressive character was maintained throughout the continuance of the disease.

Persistent insomnia, not yielding to hygienic or medicinal agencies, is a very general early symptom. It is frequently accompanied by intense and frequently recurring hemicrania. It is believed by many to indicate intra-cranial pressure, but this is not absolutely certain.

Ophthalmoscopic examination does not show increased intra-cranial pressure. In other cases there is an uncontrollable desire to sleep. The patient falls asleep in the midst of his occupation or in company.

Early symptoms also are losses of consciousness varying in degree from momentary dizziness or faintness, to apparently true apoplectic attacks. They are present in nearly every case and are important diagnostic signs. After severe attacks there may be complete hemiplegia which, however, usually disappears in a few hours or days. The attacks are evidently not due to extravasation of blood or thrombus of the cerebral vessels, but probably to circumscribed edema of the brain, which rapidly passes away. I have seen cases of general paresis in advanced stages, with apoplectic attacks, sometimes with convulsions, followed by profound coma, contracted pupil and Cheyne-Stokes respiration, and after predicting a fatal termination of the case within two hours, have had the patients still in the hospital three months later. Convulsions, epileptiform in character, may also be

present as early symptoms, but are usually met with in later stages.

The loss of memory is most profound in those cases passing early into a state of dementia. Several of these cases have come under my observation. The loss of memory was the most marked psychical symptom, the other symptoms of dementia being added later.

Among the physical symptoms the earliest and most characteristic are those connected with the innervation of the iris. The pupil is usually irregular, mostly dilated, more rarely contracted, in the fewest cases normal in diameter. The pupils of the two sides often vary in size and reaction. The reaction to light and sensation may be retarded or entirely abolished. The Argyll-Robertson pupil, so characteristic of tabes, is also a frequent symptom of general paresis. It probably depends upon similar degenerative processes as in the former disease. It is said that the ocular symptoms—inequality of the pupils, myosis and Argyll-Robertson pupil—have been noted several years before the outbreak of the mental disturbances. It is related that a medical man said in a joking way to a colleague that he would be compelled to take quarters in an insane asylum because his pupils were irregular, and a few years later actually died in such an institution.

I am reminded here of a case that I examined several years ago, in whom the pupils were contracted and not reacting to light or sensation but to accommodation (Argyll-Robertson pupil). In order to get a chance to examine the pupillary reaction, I said to the patient, whose expansive delusions seemed to be very moderate: "How is your eyesight; is it good?" "Oh," said he, "my eyesight is first-rate. Last year, on the steamer, I could see a thousand miles!"

Other motor symptoms are changes in the deep reflexes. The patellar reflex is oftenest increased, but may be normal, diminished or absent. It has no diagnostic significance, except in connection with other physical or mental symptoms. The facial muscles often show signs of involvement. A fibril-

lary tremor or twitching of the muscles about the mouth, sometimes a spastic condition of single muscles or groups of muscles about the face; loss of expression from paresis of certain muscle groups is not rare. On protruding the tongue, the organ is tremulous or protruded in a spastic or jerky way.

The speech is jerky, slow, or "scanning." In advanced cases it becomes slurring. Syllables are dropped or repeated. Certain words are pronounced with difficulty, the test-words, "truly rural," usually running into "toory looral." Later the speech becomes indistinct and finally degenerates into an inarticulate sound, in which no words can be distinguished. The speech-defects are probably due to fibrillary tremor or twitchings of the tongue and lips. The lines of expression in the face become effaced in the later stages of paresis, but this sign can at times be noticed among the early symptoms on careful examination.

An early symptom is retention of the urine, which is due to loss of contractile power, or of reflex sensibility in the bladder walls. The over-distended bladder may dribble urine and this may be considered paralytic in nature. In later stages there is dribbling from relaxation of the sphincter. Grinding of the teeth is probably a symptom of cortical irritation. It is often considered as specially characteristic of general paresis but I have seen it well marked in one case of senile dementia.

The gait may be spastic or ataxic as in a case already referred to. In more advanced cases it become slouching or dragging.

Sometimes the apoplectic attacks are due to internal hemorrhagic pachymeningitis, and in these cases death often follows soon after the attack. I have seen one case of this in which the delusions were throughout of the depressive form. The patient had a history of alcoholic abuse before admission. He was depressed, surly and obstinate. One morning as he was going to breakfast he fell in the ward unconscious and when carried to bed was found paralyzed on one side. He had

one-sided spasms with distinct localizing signals, and I was strongly tempted to trephine him but his friends objected. He died three days afterward, without recovering consciousness. Post-mortem, the under surface of the thickened dura, on the side opposite to the spasms and hemiplegia, was covered with a thin fresh blood clot.

Cerebral syphilis, tabes, chronic alcoholism and cerebral neurasthenia must be differentiated from general paresis in its early stages. In syphilis, there are more frequently symptoms referable to gross brain lesions, ptosis and other monoplegiae or more persistent hemiplegia than in general paresis. Tabes has strongly marked motor and sensory symptoms not usually present in general paresis, although they may complicate the latter.

Chronic alcoholism sometimes presents symptoms resembling early general paresis, but the ocular symptoms of the latter are absent. The tremor and epileptiform attacks and mental manifestations are easily mistaken for the same classes of symptoms in general paresis. This is especially the case where the delusions are of the depressive form. In alcoholic insanity, however, there are more frequently delusions of suspicion, and in married persons delusions of infidelity on the part of the spouse which may lead to criminal acts.

The mental symptoms, insomnia, loss of memory and hypochondriac sensations of cerebral neurasthenia may be confounded with general paresis, but the ocular symptoms of the latter are absent.

An individual presenting the symp-

toms above briefly alluded to, namely, persistent insomnia with headache; a gradual change in his moral nature, loss of regard for public opinion, peculiarities in his psychical life, coming on so gradually as not to attract attention until opinions or acts more peculiar than usual are manifested; delusions either of persecution, depression or grandeur, irregular, dilated or contracted pupils with absence of the usual reactions to light or sensation reflexes, the persistence of the accommodation reflex, attacks of faintness or losses of consciousness, heightened patellar reflex—should be viewed as a beginning case of general paresis. If the usual speech defects characterizing this disease are present, the diagnosis may be regarded as reasonably sure.

One point I would especially emphasize is that delusions of grandeur, so often considered as characteristic of general paresis, may be absent throughout the entire course of the disease, and often are not present in the early stages.

The treatment does not promise much even in the early stages. There seems no doubt that if the patient is early brought under proper care, life may be prolonged, although recovery may not be obtained.

A patient with general paresis should be placed under restraint as soon as the diagnosis is made. Complete removal from the excitements of business or of the distractions of social life is essential.

Regarding medicinal treatment, there is not much to say. Possibly potassium iodide in large doses will prove of value. Up to the present it has not had a fair trial.

A CASE OF ENDOTHELIOMA OF THE VAGINAL CERVIX.

BRAETZ describes in the *University Medical Magazine* a case appearing at the Halle clinic for women which he believes to be an endothelioma. A similar case has been reported by Amann in the same journal. The patient was eighteen years of age and came complaining of leucorrhea. A tumor, two centimeters in diameter, was found

growing from the posterior lip of the cervix. It bled easily and the tissue was friable, and easily broken off. Kaltenbach removed the uterus *per vaginam*. Four weeks after leaving the hospital the patient died. The cause of death was not determined, but very possibly resulted from metastasis. The microscopical sections are shown in six illustrations. The growth was thought to have originated in the endothelium of the lymph-spaces.

TO WHAT EXTENT DOES THE HYPERTROPHIED PHARYNGEAL TONSIL ATROPHY AT OR ABOUT PUBERTY?

By S. K. Merrick, M. D.,

Professor of Diseases of the Nose, Throat and Chest, Baltimore Medical College.

READ AT THE SEMI-ANNUAL MEETING OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND,
HELD AT HAGERSTOWN, MARYLAND, NOVEMBER 10 AND 11, 1896.

I HAVE been prompted to bring this question to the attention of the Faculty by the frequency of the allegation on the part of the family physician, according to the statements of the patients, that the enlarged pharyngeal tonsil will disappear spontaneously at from 12 to 14 years of age. The same opinion is more frequently expressed with reference to the enlarged faucial tonsils, for they are much more commonly recognized.

I have taken some pains to ascertain whether their opinions were based on observation or upon the text-books and the following quotations from a number of the latter show that there is little doubt as to the source of their information.

Several of the works consulted have been used largely as text-books in the medical colleges of this country and any statement made in them would necessarily have a wide circulation. I am somewhat surprised to find, however, that a majority of the authorities examined either give a guarded statement touching this supposed disappearance which results at puberty or content themselves by placing a much greater age limitation upon spontaneous cures. But the statements by others are so sweeping and emphatic that they undoubtedly have had much to do with impressing the idea upon the professional mind.

Beverly Robinson, in his book entitled "Nasal Catarrh," says: "It is the opinion of most observers that adenoid vegetations are seen with greatest frequency in youth and that after 25 years of age their appearance is very rare." He further says: "Although there is an undoubted tendency in certain cases for adenoid vegetations to diminish and

entirely disappear with increasing years, this consideration should not encourage us to let them alone when they are discovered. Patients who have them are unfortunately more liable to be attacked with inflammatory affections of the throat than others. Children may become victims to asthma for no other reason. When such lesions do occur they cannot be radically cured unless the glandular hypertrophy be first effectively treated."

Woakes, without declaring at what age these formations begin to atrophy, explains their relative infrequency in adult life in the following way: "By reason of the increased space in the naso-pharyngeal region, there is a freer access of air, readier escape of secretions and consequently greater dryness of the surroundings generally. The soil thus drained and ventilated appears unfitted for the vegetations to flourish upon and they accordingly disappear." This is a very conservative statement and the inference is clear that he does not believe that they usually atrophy at puberty.

Bosworth says: "The disease is essentially one of child-life, developing in infancy and probably not infrequently being congenital. Like other glandular hypertrophies, these growths show a tendency to apparently disappear at puberty. This may be explained by a diminution in the morbid activity of the tissues and a certain amount of shrinking which occurs in this peculiar form of growth at this age and also by the fact that they occupy a relatively smaller space in the now more widely-developed pharyngeal vault. . . . The predisposing cause of the disease lies in that general predisposition by which in young children a morbid pro-

cess develops and has its highest activity in the epithelial and lymphatic structures which disappears at puberty and changes to a tendency to activity in connective tissue-structures." But an analysis of the 75 cases which he reports in his book would seem to disperse the conclusions at which he has arrived. Of these 75 cases only 19 were under 15 years of age, while 56 ranged from this age to 50 years.

Sajous and Lennox Browne say that adenoids at the pharyngeal vault spontaneously disappear after 30 years, a conclusion which accords with my own experience.

McBride simply says: "These vegetations usually occur in childhood, but that he has operated on a case 46 years old."

Ingals says: "Probably in 75 per cent. of the cases the gland, if left to itself, would atrophy at or about the 12th or 14th year of the patient's age, but in the meantime irreparable mischief to the ear, the voice, or general health, may result. In the remaining cases the gland gradually diminishes in size and disappears before middle life."

To the last sentence I take no exception, nor to that part of the preceding one which shows the dangers of postponing operative measures, but enter a most respectful but emphatic protest against the statement that in 75 per cent. of the cases, the gland, if left to itself, would probably atrophy at about 12 to 14 years of the patient's age. I am strongly of the opinion that 5 per cent. would cover all such cases. As an antithesis to Ingals' statement, Sir Morell Mackenzie says the faucial tonsil not infrequently begins to hypertrophy at about puberty, owing, as some suppose, to a sympathetic connection between the sexual organs and the tonsils.

I cite this opinion because every throat specialist who has seen many cases of hypertrophy of the pharyngeal tonsil knows in what a large per cent. there is also hypertrophy of the faucial tonsils. The pathological process in both is essentially similar, there being only this difference, that there is a

slightly greater development of fibrous tissue in the faucial tonsils due to their exposed position. Mackenzie says they spontaneously disappear after 30 years. This is generally so, yet I have operated on a case 56 years old and I have now a case under my care, with considerable hypertrophy of these glands, at the age of 64 years. These, of course, are rare exceptions.

Of the well-known authors I have quoted, only two of them state that spontaneous atrophy takes place at puberty—these are Bosworth and Ingals. The former, however, in one statement does not seem to be very certain, for he says: "These growths have a tendency to apparently disappear at puberty." This is a very guarded declaration and was probably based on his clinical observation. Further on, however, he seems to have convinced himself on histological grounds that atrophy at this age does take place. He says: "The predisposing cause of the disease lies in that general predisposition by which in young children a morbid process develops and has its highest activity in the epithelial and lymphatic structures which disappear at puberty." Ingals declares "that 75 per cent. would probably get well if left alone by the 12th or 14th year," but in the same sentence points out the dangers of such a course.

Now I submit the only possible way he had or could have of verifying his opinion would have been by refusing to operate on 75 per cent. at least of the cases brought to him and then watch them till they reached the crucial age of puberty. This would have been going counter to the advice he so strongly sets forth and we know of course he did not do it. The cases upon which he operated would throw no light on this question, except the few in which there was failure to effect a cure and these would, instead of confirming this proposition, go far towards disproving it. So extreme a statement as this must come coupled with the grounds upon which it rests before it can be accepted. I must therefore reject it as being misleading and unworthy, as I think, of a place in his most excellent treatise,

which I use as a text-book in my class at the Baltimore Medical College.

Sooner or later every clinician is governed in his opinions upon matters like the one under discussion, by his own experience, and when this has been extensive I can conceive of no safer guide; it behooves him, however, to respect the opinions of those who differ with him and to use every means at his command to ascertain the grounds upon which this difference is based.

The only reliable statistical knowledge personal to myself has been derived from watching those cases when an operation has been declined and mere palliatives were resorted to. I have never seen one of them spontaneously disappear at puberty. The large number of cases I have operated on during the progress of these observations, extending over fifteen years, proves nothing with regard to spontaneous atrophy, but the ages at which they applied for treatment furnish the strongest sort of an argument against the theory of atrophy at puberty.

Out of fifty cases operated upon in 1895 and 1896, sixteen were under 14 years, while thirty-four were above that age. These statistics give a rather smaller per cent. over 14 years than Bosworth's 75 cases furnished, but rather larger per cent. than those of Wilhelm Meyer of Copenhagen, who reported 102 cases.

If any considerable number of cases atrophy spontaneously at puberty, why do all the available statistics show a larger number applying for treatment after this age? It seems to me the statistics absolutely dispose of this theory (for that is all that it possibly amounts to) and sustains the position I take, viz.: that an insignificant number of these hypertrophied glands will disappear at puberty if left to themselves.

I have questioned a number of the throat specialists of Baltimore since I thought of writing this short paper—the form of question being: "Have you ever seen a case of adenoid vegetations at the pharyngeal vault recover spontaneously at puberty?" They all answered uniformly in the negative

with one exception, and his somewhat euphemistic answer was, "Yes; in the books." I am glad, however, to find from a majority of the books examined that they do not endorse the theory of spontaneous atrophy at so youthful an age as puberty. It cannot be said, however, that they openly express skepticism upon the subject. In most of them, however, it is very certain they do not believe in it.

It is generally taught that the etiological factors mostly concerned in the production of the adenoid vegetations are heredity, neglected or repeated colds, the exanthematous fevers and diphtheria. Without doubt, the vast majority of these cases may be traced back to one or more of these factors as the initiative cause, but recent investigations point to the possibility of tubercular adenoids. Of these there are said to be two types. 1. The bacillary adenoids of Lermoyez, *i. e.*, when the bacilli are found inside the tissues, very rare, only 1 to 75 cases. 2. Bacilliferous adenoids, *i. e.*, when the bacilli are found on the surface of the growths (Dieulafoy) one to every five cases. The first variety has been disputed by Wright of Brooklyn, in a paper read before the American Laryngological Association in Pittsburg May 14, 1896, detailing experiments performed on guinea-pigs with adenoids, and in every case with negative results. He cites similar experiments performed by Dr. W. H. Parks with identical results. Botey of Barcelona has also published similar results to those of Wright of Brooklyn.

This question may still be regarded as not definitely settled. It has been noticed simply because it has, I think, a very practical bearing on the question of spontaneous atrophy at puberty. We know that the most active period of tuberculosis is between eighteen and thirty years, and if the bacillus is a factor in hypertrophy of the pharyngeal tonsil, is it not a little singular that this is just the time of life when spontaneous atrophy is beginning to be pronounced? Still may its rare occurrence in one form within the tissues not account for these cases which are occasion-

ally encountered, which yield such poor results to any form of treatment?

There is certainly nothing in the history of tuberculosis to favor spontaneous atrophy at puberty, but there is much in it to explain these cases which have a strong tendency to recur, even after the most radical removal, when the patient is between 16 and 30 years. Hopkins, in the Manhattan Eye and Ear Hospital Report, January, 1895, puts on record 12 cases of recurring adenoids after removal by competent operators, the most improved methods being employed. In some cases general anesthesia was induced, in others reliance was placed on cocaine. His conclusions are that recurrence does take place in a certain per cent. of cases regardless of the methods of procedure. Further investigation may prove this class to be of tubercular origin.

In conclusion, there are three points upon which I wish to lay peculiar stress.

1. Only a small minority of the writers of the text-books examined say that these hypertrophied glands spontaneously atrophy at puberty.

2. Those who do say so furnish absolutely no statistical ground upon which they base their opinions.

3. No practical laryngologist of my acquaintance, who was interrogated, had ever seen a case undergo this atrophic change at puberty, without the aid of operative measures.

In view, therefore, of the foregoing cumulative evidence against the proposition of spontaneous atrophy at puberty, it is high time that authors cease to advance this false doctrine or give some very cogent reason for the faith that is in them.

UREMIA IN PREGNANCY WITHOUT ECLAMPSIA.

LEVITSKY (*British Medical Journal*) noted symptoms of uremia in a primipara a month before delivery. Labor was normal. On the second day of childbed, however, the patient became semicomatose and perfectly blind. The urine contained casts and was highly albuminous. The patient speedily recovered. Thus, says Levitsky, uremia alone does not cause puerperal eclampsia.

Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

SEMI-ANNUAL MEETING HELD AT HAGERSTOWN, MD.,
TUESDAY AND WEDNESDAY, NOVEMBER
10 AND 11, 1896.

TUESDAY, NOVEMBER 10, FIRST DAY.

Dr. John C. Hemmeter read a paper entitled CONCERNING THE NATURE AND TREATMENT OF GASTRIC ACIDITY.

Dr. George J. Preston read a paper on CEREBRAL SYPHILIS. (See page 127.)

Dr. Edward N. Brush: There are one or two points in Dr. Preston's paper upon which I should like to speak and a question or two which I should like to ask. In the first place, if I correctly understood Dr. Preston, that cerebral syphilis frequently appears within two, three, or even four years, after the initial lesion, his experience has been contrary to my own and I believe contrary to that of many other observers. I have seen more or less of cerebral syphilis ever since my student days, when I had most excellent opportunities to study several cases, which I made the subject of my inaugural thesis.

I do not by any means deny that nervous symptoms do not sometimes appear quite early—for example during the secondary period—but my own experience and my examination of cases reported by others would lead me to the conclusion that nervous symptoms in the great majority of cases appeared long after the initial lesion, so long indeed in many that a clear history of specific infection is often obtained, if at all, with great difficulty.

Now as to the relations of syphilis with paresis, that is a moot point and as Dr. Rohé in his paper on the early symptoms of paresis may touch upon it I will simply say that I have not yet been able to accept the "pseudo-paresis" of some writers, and while it is very manifest that the large number of paretics are syphilitic it is not at all clear in all cases that the relations of cause and effect are well made out. Some of the cases which Dr. Preston speaks of as easily mistaken for paresis are, I believe, paresis, and in some others

in which the diagnosis is not clear because of obscure clinical symptoms, it is my experience that the syphilis has simply complicated the case, and that eventually a clear case of paresis is made out, which is in no way influenced by anti-syphilitic treatment.

Dr. Preston has spoken of an ounce of iodide of potassium a day as heroic medication; it is, and yet some cases will only yield to just that kind of treatment. In 1874 I reported some cases taking large doses, and I now have to report a case in which three hundred grains were given three times a day. The patient was in my opinion a paretic, but he was given the benefit of the doubt and these large doses administered with the advice and concurrence of Dr. E. L. Keyes of New York. For a short time, a year ago, all his mental symptoms left him, but the remission was but of a few months' duration, and at present the diagnosis seems established.

As to the therapeutic test. I have already in conjunction with Dr. Osler and several others expressed my disbelief in its value. I do not admit for a moment that because a patient can take large doses of iodide of potassium he is to all intents to be treated as a syphilitic case. I have seen patients whom I knew had syphilis who could not take ten or fifteen grains at a dose and others who never had even an exposure who could take with no discomfort much larger doses.

I should like to ask Dr. Preston, or any one present, if he has ever observed the absence of the patellar reflex in cases of delirium in the secondary stage.

Dr. John Whitridge Williams read a paper entitled *MALARIA COMPLICATING GYNECOLOGICAL OPERATIONS*. He spoke of the importance of examining the blood in all febrile conditions and the necessity for great accuracy and said that post-partum fever was more frequently attributed to puerperal fever than to malarial fever and that there were few references to malaria post-partum in the text-books. He had two cases recently. In the first the examination of the blood had given him

great confidence and had allowed him to exclude sepsis. In the second case the neglect of the blood examination had resulted in a faulty diagnosis and as a consequence an operation was performed although as it turned out this operation was entirely justifiable. These two cases convinced him of the importance of blood examinations in all febrile cases after labor, even although malaria is not suspected. He is confident that malarial fever is often mistaken and treated for post-partum troubles.

Dr. J. M. Hundley said that he had had several cases of late in which malaria complicated gynecological operations and a blood examination had made the diagnosis certain and he thought that this year especially such malarial complications were more common.

Dr. J. M. Hundley then read a paper on the *VALUE OF CYSTOSCOPY IN THE DIAGNOSIS AND TREATMENT OF DISEASES OF THE FEMALE BLADDER*. (See page 134.)

Dr. A. C. Wentz of Hanover, Pa.: I would like to report a case of similar character. The history is that she had complained for three years and passed through various medical hands. She was passing her urine forty-eight times in twenty-four hours and as often sometimes as twenty times during the night. I used the method of Dr. Clarke of applying 10 per cent. ichthyol ointment. I succeeded in restoring healthy tissue to the bladder. There were pus and blood clots in the urine and at one time she passed a tablespoonful of blood. With the 10 per cent. nitrate of silver solution I was able to heal some of the ulcers, but not those hidden in the crevices or folds of the mucous membrane. I then used Clarke's method and she is now well and doing her work. The right ureter has a number of granulations, which as yet I have feared to remove lest I should close it.

Dr. S. K. Merrick read a paper entitled *TO WHAT EXTENT DOES THE HYPERTROPHIED PHARYNGEAL TONSIL ATROPHY AT OR ABOUT PUBERTY*. (See page 152.)

Dr. John N. Mackenzie: I am sorry I can contribute nothing towards the

solution of the question involved in the title of this paper. Personally, I do not allow cases to reach that age without operation if I can help it and I would like to impress upon the members present the importance of such operations. In the early years of growth there is great necessity for perfect respiration. I do not hesitate to operate upon infants in arms and I think the earlier the operation is done the better, for if they are allowed to proceed, we have the countenance disfigured and the whole general health of the little patient disturbed and I therefore impress upon you the absolute need of early removal of adenoid tissue from the throat in every case.

Dr. Geo. H. Rohé read a paper on THE EARLY SYMPTOMS OF PARESIS. (See page 148.)

Dr. Edward N. Brush: The paper of Dr. Rohé is a timely one and leaves little to be said. I think that practically we can say that the early symptoms of paresis occur in somewhat this order: 1. Vasomotor. 2. Motor. 3. Psychic. The vasomotor paresis results in early congestion of the cerebral vessels, with accompanying restlessness, headache, irritability, vertigo and even delirium.

The motor symptoms vary in intensity and in the parts involved. They are a progressive disturbance of coördination, with occasional regional insufficiency, unequal pupils, fibrillary tremors, especially of labial and lingual muscles, disturbed speech and apoplectic attacks. The initial speech disturbances are cortical in origin and are probably most often due to a lesion in the central gyrus at its foot and bordering on the third left frontal convolution.

The psychic symptoms begin with commonly alternating elation or at least sense of well-being and depression, with paroxysms of irritability. The patient is easily pleased and as easily led. I have often remarked upon the comparative ease with which cases of paresis could be turned from their plans and projects and induced to follow the suggestions of others. These symptoms may last for a long time and be looked

upon as merely an unaccountable change of character. In time, however, other changes come and to these Dr. Rohé has alluded. I am glad that he has called attention to the mistaken impression that these cases have always extravagant ideas, delusions of wealth and power. Not infrequently paresis is ushered in with depressing ideas and in many cases dementia is present from the first almost with only vague ideas of well-being.

Medical Progress.

MENSTRUAL SKIN ERUPTION.—Nicolaysen (*British Medical Journal*) observed the appearance of a rash at each period in a girl, aged 23. She was admitted into hospital for ulcer of the right tonsil, at first believed to be syphilitic; but this healed, it would appear from the report, spontaneously. She was watched in hospital for over five months, and at every period a maculo-papular exanthematous rash appeared. It broke out symmetrically on the shoulders, back and elbows. On one occasion there was also an eruption of herpes on the tonsils and right labium. The rash faded slowly, and some of the papillae underwent desquamation. Nicolaysen insists that it was distinct in feature from any syphiloderm and from lichen ruber. He applies to it the term "lichen menstrualis."

* * *

SUTURE OF THE ARTERIAL WALLS.—Heidenhain. (*Philadelphia Polyclinic*.) During the course of an operation for cancer of the breast, Heidenhain unluckily cut away a piece of the wall of the axillary artery. He immediately compressed the vessel above and below and closed the orifice temporarily by hemostatic forceps; he sutured the lips of the wound with catgut, applying endothelium to endothelium; then he removed the forceps. The patient recovered with no occurrence of secondary hemorrhage and with the function of the arm intact. The patient was 59 years of age and the author advised that one should not allow arterio-sclerosis to deter him in similar cases.

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BALTIMORE, DECEMBER 12, 1896.

THE fact that a few boys were bitten, some quite seriously, by a rabid dog recently in the outskirts of Baltimore, *A Pasteur Institute for Baltimore* has stirred up the community to the importance of the Pasteur method of anti-rabic inoculation and two Baltimore daily papers, with a mixed spirit of self-advertising and generosity, have seen that these boys have been sent to New York to receive the treatment which could not be obtained in Baltimore.

The outcome of this is that many advocate the opening of an institution in Baltimore where persons bitten by rabid animals may receive prompt treatment without the expense and delay of going to another city. The movement may be a proper one and the idea of putting such an institution under the wing of the College of Physicians and Surgeons immediately under the supervision of that skilful post-mortem physician, Dr. N. G. Keirle, is eminently fitting. It would be better, however, to delay doing anything in the matter until this wave of enthusiasm has

rolled by and calm judgment can decide on the proper course.

There is much sentiment wasted and too much nonsense talked about the prevalence of hydrophobia. Few persons and not many physicians know anything about the disease and those who have seen a case of genuine rabies in the human being, in Baltimore at least, can almost be counted on the fingers.

Dr. Irving C. Rosse read a very interesting paper on "Newspaper Rabies" before the American Neurological Association last June and this paper, which appeared in the MARYLAND MEDICAL JOURNAL for July 25, 1896, makes very timely reading. The press was at that time, a few months ago, just as ready to uphold Dr. Rosse's views as they are now to hold up the prevalence of hydrophobia.

Few persons consider the long period of incubation in rabies and instances have been recorded in which a person bitten by a rabid dog had died in the agony of hydrophobia within a few days, which, of course, is absurd. The editorial on "Newspaper Rabies," which appeared in the issue of this JOURNAL containing Dr. Rosse's article, read as follows and is just as true now as it was then:

"The advice given by Phœbus Apollo to Phaethon when the latter was about to start off in the sun chariot is of a kind to be recommended to many persons. The middle course is the safest and so the timely article of Dr. Rosse on the kind of hydrophobia usually described by the press should receive the careful scrutiny of common sense and reason.

"There are many persons who believe, with some good grounds of support, that no such disease as hydrophobia exists and it most certainly does not appear as often as one would be led to believe by the constant killing of dogs in hot weather.

"It is certainly true that all animals, and especially those which cannot sweat as man, but which have to rely on the water evaporation from the tongue as a means of losing heat, suffer intensely in the warmest weather, and because a dog acts queerly in hot weather there is no reason why he should be shot. The mere slaughter of the dogs without an examination defeats the object in view.

"If it can be proved that the dog is only suffering from temporary cerebral congestion from the extreme heat, and recovers in a day or two, then the relief to the person bitten

and his friends is great, but if the dog be killed nothing is proved and the anxiety is great and for weeks every disorder and nervous trouble produced by the extreme tension of suspense in the one bitten is attributed to the action of the germ of rabies."

"If there is one question on which the public needs enlightening it is on that of rabies and what it is. The cures effected by the various Pasteur institutes are, some of them, actual cures from that disease and prevent the advent of the disease just as vaccination will keep off smallpox, but many anti-rabic injections ease the mind and are examples of *post hoc*. The patient is sure that some of the poison has been introduced into his circulation, so he straightway betakes himself to one of these institutes and undergoes the treatment, returning to his friends and home entirely well.

"In so many instances this is a species of faith cure and yet the results are just as satisfactory, for in many cases, whether the poison had entered the system or not, some evil effects would have followed the bite and this the treatment will keep off. There are, however, many cases in which the dog has genuine hydrophobia and in which the anti-rabic treatment, as suggested by Pasteur, effectually removes all danger and cures.

"The only way to distinguish between true hydrophobia and pseudo-hydrophobia is rather a dangerous experiment for the persons bitten. Pathologists all firmly believe in Pasteur's treatment and produce figures to show that many cases of hydrophobia exist, while, on the other hand, practitioners doubt the occurrence of so many cases and are skeptical at the brilliant array of statistics.

"The paper of Dr. Rosse is a very proper one to call attention to the extremists both for and against, and persons should read and not be hasty in believing in rabies unless adequate proof has been brought forward."

In view of these facts, the point is still maintained that no hurried action should be taken to open a Pasteur Institute in Baltimore until all phases of the question have been considered. If the City Fathers have so much money to spend let them erect a hospital for contagious diseases. Moreover, the expense of a Pasteur institute would be beyond the small sum subscribed and out of proportion to the few cases applying for treatment.

EACH week there appears additional testimony as to the efficacy of the new diagnostic method in typhoid fever, *Typhoid Diagnosis*. as suggested by Pfeiffer, Vidal, Johnston and many others. In this issue Dr. Simon Flexner gives a very clear and careful account of the method followed in making a diagnosis of typhoid fever and his paper is well worth a careful perusal.

The press in general and some medical journals have spoken as if this was a parallel discovery with the diphtheria antitoxine and that it was a method to cure typhoid. While investigators are, of course, looking to the cure of the disease through this antitoxic action of the serum, no cures have yet been reached in this way and so far the discovery has only a diagnostic value. The simpler this reaction can be made the more universally will it be used.

In the *Medical Record* for December 5, Dr. Charles Lyman Green of St. Paul finds that the serum test may now be used without the microscope. In his experience this test is absolutely pathognomonic for typhoid fever and he relies on it with the greatest confidence. Noting the power of the typhoid patient serum to cause a cessation of motility and a grouping of the typhoid bacilli, he found that when slides thus treated were held to the light, the clumps gave the preparation a mottled appearance which were sufficiently characteristic to allow of a diagnosis without the microscope.

While this test has been simplified by many observers, it must be remembered that they have all had more or less experience with the methods laid down by the discoverers and it would not be safe for one unskilled to place too much reliance on his own work without some training from those more experienced. There are many dangers which are not usually enumerated but which might occur to the beginner in this work.

Even if no further use be made of this reaction, it must be admitted that it is a discovery of great practical utility and is one of the many results which have gradually come from that apparently theoretical study of bacteriology, and this should convince the most ardent utilitarian that because a method cannot be put to some practical use at once, it is not necessarily worthless and to be despised.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending December 5, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		16
Phthisis Pulmonalis.....		20
Measles.....		
Whooping Cough.....	2	1
Pseudo-membranous Croup and Diphtheria. }	26	17
Mumps.....	6	
Scarlet fever.....	13	1
Varioloid.....		
Varicella.....	4	
Typhoid fever.....	9	1

Dr. John Ruhrah has been put in charge of the department of bacteriology at the Woman's Medical College.

The State Board of Health met last Thursday and reported on diphtheria and other diseases in the counties.

The opening of the Frick Library took place last Thursday under most favorable auspices. An account will appear next week.

The Episcopal Hospital of Philadelphia, through the children of the late George L. Harrison, have received an additional \$150,000, making \$300,000 in all from that source.

Dr. Osler gave a luncheon last Thursday at 2 o'clock to the Trustees of the Faculty and a few other physicians to meet Mr. M. F. Frick, Drs. J. M. DaCosta of Philadelphia and J. D. Bryant of New York.

The *National Medical Review* announces that Dr. F. Fehleisen, the discoverer of the streptococcus of erysipelas, will begin a course of lectures at the School of Medicine of Georgetown University, next week.

At the last meeting of the Clinical Society of Maryland, held December 4, the following candidates for membership were elected: Drs. Edward E. Gibbons, Edward Milholland, C. M. Ellis, Elkton, Walton Bolgiano, C. N. Athey, J. McFadden Dick.

It is to be hoped that the Mayor of Baltimore will veto the ordinance to appropriate \$300 to pay the expenses of a council committee to visit other cities and inspect meth-

ods for collecting and disposing of garbage. One report has been recently made and it is likely that the Health Commissioner can give all the information needed in a much more intelligent manner than can a set of councilmen who want a trip at the taxpayers' expense.

Dr. John S. Conrad of Relay, Md., died at the home of his brother, Prof. T. N. Conrad, Occoquan, Va., last Monday. Three years ago Dr. Conrad was stricken with paralysis and has since been bedridden. Dr. Conrad was born at Fairfax Courthouse, Virginia, February 17, 1839, and removed to Baltimore in 1853. He received his primary education at the Vernon and Newton academies and later obtained a situation in the drug store of Dr. Elisha Perkins and attended lectures in the College of Pharmacy. He was graduated second in a class of nine in 1860. He then attended lectures at the medical school of the Columbia University, Washington. He was graduated from that university in March, 1862, and immediately went South, being commissioned in April of the same year as an assistant surgeon in the Confederate Army. In 1868 he was appointed resident physician of the Baltimore Infirmary (University Hospital) and in 1871 physician-in-charge of the Marine Hospital for the port of Baltimore. He was in charge of this hospital during the epidemic of smallpox and typhus fever in 1871-72. He contracted typhus and nearly lost his life. After spending two sessions in teaching in the medical department of the Washington University (now College of Physicians and Surgeons) at Baltimore he was elected resident physician of the Maryland Hospital for the Insane at Spring Grove. In 1875 he was elected superintendent and served until 1878, during which time he introduced many reforms and advanced methods which brought the institution up to a high standard of efficiency. Dr. Conrad was a member of the Medical and Chirurgical Faculty of Maryland, of the Baltimore Medical Association, the Baltimore Academy of Medicine, the American Public Health Association and of the American Association of Medical Superintendents of the Insane. He was widely known and highly esteemed by the profession throughout the United States. Of late years he conducted a private asylum at Relay.

Book Reviews.

REFERENCE-BOOK OF PRACTICAL THERAPEUTICS. By Various Authors. Edited by Frank P. Foster, M. D., Editor of the *New York Medical Journal*, and of Foster's Encyclopedic Medical Dictionary. In two Volumes. Vol. I. New York: D. Appleton & Company. 1896.

This is an excellent book for the practicing physician. In reality it is a manual of treatment by various authors. As the editor states, on the wave of over-activity in which we are riding it is no easy task for the practitioner to judiciously employ many of the new remedial agencies, and he requires the frequent appearance of trustworthy records of what has been accomplished. The articles on the whole are very well up to date and thoroughly trustworthy. Among the best articles, really, are those relating to the old time measures—remedial baths, exercise, diet, massage. There is not only a very full article on baths by Dr. Armstrong, but an exhaustive section on hydriatics by the late Dr. Westbrook and Dr. Brickner.

There is an occasional glaring discrepancy; as, for example, the article on such a first-class drug as digitalis is by no means so full as it should have been, while a drug in such slight use as hydrocyanic acid has devoted to it nine double-column pages.

In a work of this kind one is a little surprised, perhaps, to find certain proprietary remedies considered. The editor professes, however, to have exercised due editorial caution. At any rate he has tried to guard against criticism by the following paragraph: "There is another class that may be called catchpenny products, put upon the market, which are to be carefully distinguished from those proprietary preparations that are really reliable, that are produced by careful and honorable makers, and that are in actual use by practitioners of high attainments and known probity. Many of these preparations are used almost daily by practicing physicians. Still, among proprietary medicines we find certain ones mentioned which might very properly be left out, but such a dubious compound as autiphthisin is given a place, which is, we think, a serious mistake. The only Maryland contributor is Dr. George H. Rohé.

The book is issued in Appleton's best style, well printed and well bound.

Current Editorial Comment.

THE OPERATIVE ITCH.

Clinical Chronicle.

THIS is a peculiar form of pruritus which is apt to attack members of the medical profession only. The bacillus of this disease viewed under the microscope resembles a human hand; each finger, however, being a scalpel and the thumb a pair of scissors. I speak of it only as it occurs in the realm of nose, throat and ear diseases, although my confrères in other lines of practice will readily distinguish it as it occurs in their domain. Like all other forms of itch, it requires vigorous measures to thoroughly rid each special line of practice of this troublesome parasite.

THE GYNECOLOGIST HIMSELF.

New York State Medical Reporter.

IT seems to me that no physician with hands above medium size should attempt to practice gynecology. Of course no physician can be blamed if he has unusually large hands, but it is a misfortune that should debar him from attempting to practice a branch of the profession when a small or medium-sized hand and a light and sensitive touch are among the requirements that are almost indispensable. The gynecologist, of course, should thoroughly understand his business first of all, and should always know what he is about to do, and why, thereby inspiring the confidence without which success is very problematical in any branch of the profession.

THE AMERICAN STOMACH.

Medical Fortnightly.

THIS nation has not yet settled down to a routine calculated to bring dietetic hygiene into the repute it deserves. We are yet under the rule of the domineering, half-educated cook, who is monarch of all she surveys, and dictator of our weal or woe. A householder who for one minute would not tolerate sewer-gas or bad water under his roof, will, without a word, eat food prepared by Biddy or Topsy which is bad—very bad—and *awful*. He will go down to his business, feel miserable, find fault with his clerks, kick the office cat and scold the central office telephone girl. Why? Because his food is not assimilated, the microbes and ptomaines are having a merry war and while the dance is on all the world is upside down and melancholy reigns supreme.

Publishers' Department.

Convention Calendar.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY**. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC**. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY**. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

THE TREATMENT OF INSOMNIA.—In the insomnia brought on by exhaustion, over-exertion, emotional causes, etc., no matter what other nervous phenomena coexist, the indication for medicinal soporifics is present. In some cases the general condition is frequently thereby improved in a wonderful manner in a few days; threatening psychoses are arrested in their development, etc. The application of the proper drug in a sufficient dose is, of course, a prerequisite for success. The best remedy of all for this purpose is undoubtedly Trional. I usually prescribe it in tablet form, 1.51 gm. on the first evening, one hour before retiring, in a wineglassful of hot milk. After taking the remedy the patient should remain quiet, be seated, talk very little, or read some indifferent literature at most. If he has slept well the first night it will be sufficient to let him take 1.0 gm. on the following evening, in the same way; if sleep was not very satisfactory, we may give 1.5 gm. again, or if no action was obtained, we may increase the dose to 2.0 gm. On the third evening 1.0 gm. will usually be a sufficient dose. The remedy should not, however, be continued longer than five evenings in succession. To prevent any unpleasant effects the patient should drink one or two bottles of either Seltzer Water, Saurbrunner, Gieshuebler, etc., every day. Patients suffering from nephritis should not receive any Trional.—DR. OTTO DORNBLUTH, Neurologist in Rostock.

NERVOUS PROSTRATION.—My son, aged 12, had been growing nervous over the shock of his brother's death, and seemed to derive no benefit from any remedies used in his case. Had him to the sea shore, change of surroundings and everything that could be done for his benefit; he still grew thinner and worse all the time. I put him on Celerina, and had marked benefit before the first bottle was used, and he has almost entirely gotten over it with the help of another bottle I got for him. I consider it a very nice and efficient nerve, just the thing for the children and nervous and delicate persons, where there is great prostration. I shall use it freely.—N. P. FRASSONI, M. D., Moosic, Pa.

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Original Articles.

ARTIFICIAL VESICO-VAGINAL FISTULA FOR THE CURE OF CHRONIC CYSTITIS AND ULCER OF THE BLADDER.

By B. Bernard Browne, M. D.,

Professor of Gynecology, Woman's Medical College of Baltimore.

CLINICAL LECTURE DELIVERED AT THE HOSPITAL OF THE GOOD SAMARITAN, NOVEMBER 20, 1896.

OF all the diseases to which women are liable, there are none that give rise to more suffering and pain than the various affections of the bladder. The treatment of these diseases is often unsatisfactory to the general practitioner on account of the difficulty of making an exact diagnosis and of locating the seat and character of the lesion.

The case I wish to bring before you today is that of Matilda W. of Ellicott City. She is 36 years of age, and has been married 20 years; has had three children, the last twelve years ago. Four years ago she had a severe attack of gripe, from which she dates her present illness; it was followed by an attack of acute cystitis with great pain and difficulty in urination and then by complete inability to pass her urine, which had to be drawn off by the catheter.

As she lived some distance from her physician, it was impossible to have it drawn off at regular intervals and sometimes she retained it for 24 and even 48 hours; this accounts for the unusual size of the bladder. From time to time during her illness she has had her bladder irrigated with a variety of preparations, but with only temporary relief. At one time (May, 1894) she suffered so much pain in the region of the right

kidney that a nephrotomy was done by the physician under whose care she then was, but no abnormal condition was found.

On October 7, 1896, she entered my service in the Hospital of The Good Samaritan. She had been confined to her bed since April and had been entirely unable to pass any water during that time. She had become emaciated and was unable to take or retain any nourishment. Her abdomen was swollen and extremely sensitive; her bladder extended nearly to the umbilicus, so enlarged had it become owing to continued over-distention. Her urine was examined and found to contain no albumen or tube casts, but was acid in reaction and contained a large quantity of pus.

Upon examination an ulcerated spot was found in the bladder, situated in the triangular space between the orifices of the ureters and the internal opening of the urethra. The bladder had become sacculated and had never been completely emptied by the catheter. The ovary and tube on the right side were enlarged and adherent to the sides of the pelvis; the uterus was somewhat enlarged and in a state of subinvolution with chronic endometritis.

For the relief of her condition it seemed necessary to remove the causes of it and at the same time to give the bladder a rest and keep it empty until the inflammation in it should subside.

One of the most important therapeutic agents for the cure of inflammation is rest; this together with cessation of the normal function is applied with benefit to inflammation of many of the organs of the body.

On October 22, as many of you will remember, who were present at the operation, the uterus was curetted, an artificial vesico-vaginal fistula was made through the sacculated portion of the bladder, a silver canula was introduced into the bladder through this opening and a rubber tube attached to the small end of the canula which rested in the vagina; by means of this canula the

bladder was to be kept entirely empty. An abdominal section was then done and the diseased right tube and ovary removed. The vagina above the fistulous opening had been packed with iodoform gauze; this was removed and replaced on every second day for one week.

At the end of two weeks the distal end of the rubber tube was tied and the urine allowed to accumulate in the bladder. It was now found that she could pass her urine freely without pain. On the 10th of November, the canula and tube were finally removed and since that time she has been urinating without the least difficulty and there is no pain whatever in the bladder. The patient has been walking about the ward for the past week and leaves today for her home in the country.

THE DANGER OF ARTIFICIAL EMACIATION.

EVERYONE has his normal weight, though circumstances may determine a more or less temporary increase or diminution thereof. A departure from the normal in either direction, says the *Medical Press*, is incompatible with perfect health. This, of course, leaves in suspense the question as to what is one's normal weight, and those who are afflicted with what appears to the dispassionate observer to be a superfluity of adipose tissue usually resent the imputation that their obesity is other than an accidental and unavoidable circumstance. This point is easily settled by trying the effects of a carefully regulated but not over-strict regimen associated with daily exercise in the open air. All really superfluous tissue will disappear, although actual weight may not be palpably diminished, firm muscle taking the place of useless and burdensome fat. Obesity, however, is essentially a condition to be dealt with on an exclusively physiological basis. It is, of course, more or less amenable to medication, but the influence of drugs involves a brutal disturbance of the processes of nutrition, which cannot but be prejudi-

cial to health. This is particularly the case in respect to the employment of thyroid gland in extract, which, in effectual doses, often entails symptoms of a very disquieting and even serious nature. It cannot be too strongly impressed upon practitioners that the thyroid treatment of obesity is one attended by a tangible amount of risk. In a German contemporary the case is recorded of a certain well-known dramatic artist, who sought to combat the opulence of form with which Nature had endowed him and died in consequence. On ceasing to be obese—for the treatment was so far successful—he lost the placid temperament which previously characterized him and became the prey of an unhappy irritability, consequent on an acute sensation of *malaise*; in short, he became nervous, impressionable and as unrecognizable from a moral as from a physical point of view.

RUPTURE OF THE KIDNEY.

DR. C. K. TOLAND recently reported in the *Canadian Medical Review* a case of rupture of the right kidney in a young man of nineteen years, who had been "charged and kneed" by an opponent while playing football.

PUERPERAL CONVULSIONS, FROM THE STANDPOINT OF PREVENTION.

By John N. Upshur, M. D.,

Professor of Practice of Medicine in the Medical College of Virginia, etc., Richmond.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, NOVEMBER 24, 1896.

A FIRM conviction of the great responsibility resting upon us in the care of the puerperal woman, and the skillful guidance through the perils of this period to its happy consummation in a safe delivery, is the motive prompting to the discussion of this condition—so frightful in its manifestations and so dire often in its consequences.

I cannot emphasize too much the importance to the patient of an early engagement of her medical attendant, that she may be closely in touch with him, and that he, by extraordinary diligence, may be keenly alive to every circumstance which may be to her a source of peril, giving to his patient advice as to personal care, of diet, exercise, rest, bowels and kidneys; making regular, often frequent, analyses of the urine to determine the presence of albumen or the lacking elimination of excrementitious solids. Often there is danger ahead when urinary analysis is negative in its results, and the nervous system is ripe for a dangerous explosion so soon as something occurs to excite the requisite reflex. I cite the following cases for sake of illustration:

CASE I.—Mrs. T., a woman of fine physique and robust health, came under my care in 1885; she would never permit me to see her until labor came on, though reported by her husband as being very dropsical. Frequent examination of her urine failed to show any albumen, though the amount of urine was scanty. Treatment, through the medium of her husband, was, of course, very unsatisfactory. When labor came on, I found her the most dropsical woman I ever saw at term. She was kept under chloroform until delivered with instruments, after a protracted labor. In four succeeding pregnancies she was never so dropsical

again, but each period of pregnancy was filled with symptoms of threatened eclampsia. The patient was a hearty feeder, her urine was usually scanty, albumen apparent on analysis, but not marked.

In her third pregnancy she had an attack of vertigo, followed by a period of insensibility; she has always suffered with her head. Her treatment during each pregnancy consisted of low diet, abundant drinking of lithia water, and keeping bowels in a condition of mild diarrhea. She has usually taken chloroform during the latter part of the second stage of labor, and has been safely delivered five times without a single convulsion, and is now doing well in her sixth pregnancy, having reached the end of the sixth month.

CASE II.—Mrs. W., of delicate build, in her second pregnancy, during the ninth month had agonizing headache, which failed to respond to remedies; she saw flashes of light and other objects continually before her eyes. When labor came on, she was kept under chloroform until delivered; her skin was so dry as to feel parched. Repeated examination of urine failed to detect any albumen. Within an hour after delivery, she complained of not being able to see (she had had no undue amount of hemorrhage) and began to talk wildly and incoherently. Chloroform was given to control excitement, followed by full doses of potassium bromide and pilocarpine; the skin acted freely and all untoward symptoms subsided; the urine showed large percentage of albumen. Convalescence was uneventful until the fourteenth day, when marked symptoms of septicemia developed, but she passed safely through a most dangerous illness.

CASE III.—Mrs. H. had been carefully

watched during her second pregnancy; the urine was frequently analyzed, with negative results.

About the time she reached the fifth and a half month I was called to see her with a sharp attack of cholera morbus; a day or two of treatment was sufficient to restore her to health. She was discharged with caution as to imprudence in diet, and every other respect. On the evening of the next day, she went out to supper, ate very heartily of almonds and raisins. I was called early the following morning to see her in what her husband called a trance. When I reached her, she talked to me rationally, and manifested no symptoms of special gravity. At 4 P. M., she was seized with a violent puerperal convulsion, quickly followed by a second, and for a few moments I thought her dead. I bled her freely from the arm, labor was brought on, and after delivery she made an uneventful recovery—the urine for the first time being loaded with albumen.

Her next pregnancy progressed satisfactorily to the ninth month, when she complained of distressing head symptoms, urine scanty, but free from albumen; some disturbance of vision. She was freely purged with calomel gr. vj., croton oil gtt. j, with complete relief of head symptoms. The week following, the head symptoms again returned; the dose of calomel and croton oil was repeated with as prompt relief as at first. Labor came on a few days after, and she was safely delivered, without any complication; convalescence was speedy and uneventful.

CASE IV.—Mrs. D., primipara, aged 22, stout and plethoric. I was retained six weeks before confinement. Frequent analysis negative, except once a trace of albumen, till October 12, when the urine was found loaded with albumen, being almost solid on boiling. I was called at 10 P. M. and found she had three convulsions, the cervix rigid, dilated the size of a nickel. She was bled freely from the arm; manual dilatation was persisted in for five hours; the child was turned and delivered; there was a serious convulsion during the labor, which looked as though it would be fatal;

no untoward symptoms occurred during convalescence. I found that she had been complaining for a week before the labor with violent headache. At the same time she had been eating enormously. I had not been consulted.

CASE V.—I was called in consultation to see Mrs. H., primipara, aged 22. I saw her at 6.30 P. M. She gave the history of an unusually comfortable pregnancy. She had engaged her medical attendant two days before and said she had passed sufficient urine. She awoke at 5 A. M. the same morning with severe headache across the vault of the cranium, extending over the occiput and down the back of her neck, and some abdominal pain, which was supposed to be colic, as her time was not up (280 days) till two weeks later. She had been abstemious in her diet during the latter part of her pregnancy, abstaining from eating any supper. Just before 3 o'clock P. M. she described a sensation in her head as if blood was trickling through it and a few moments later a violent eclamptic seizure developed. Her medical attendant, when he saw her in the morning, had ordered $\frac{1}{8}$ grain doses of sulphate of morphia every two hours—she having taken in all about $\frac{7}{8}$ grain. As soon as he saw her after the convulsion, he bled her freely and administered chloroform, controlling the convulsion. When I saw her she was completely relaxed, os fully dilated and bag of waters filling the vagina—ruptured accidentally on my examination. Labor progressed satisfactorily and she was delivered of a live baby at 8.15 P. M.—skin hot and dry, pulse soft, feeble and 120 per minute—profoundly unconscious. Another convulsion at 9 P. M. No secretion of urine since early morning; an enema of bromide of potassium, sulphate of morphia and camphor was administered and she passed into a quiet, natural sleep, having a good night with the exception of slight restlessness. She had also a hypodermic of $\frac{1}{20}$ grain sulphate of strychnia. On the next day she had three more convulsions, but of diminishing severity and longer interval; her vision was impaired and she was unable to recognize

her friends before the third day; periods of consciousness alternated with periods of delirium.

The baby had one convulsion on the day subsequent to its birth, but afterwards did well.

Remarks.—It is not my purpose to discuss the classification or causes of eclampsia; this is sufficiently done in all modern text-books. It is in the direction of such care as will prevent the occurrence of convulsions that I wish to consider the subject.

The cases cited as illustrative emphasize—first, the necessity of early engagement and subsequent close supervision. Case I shows how such care warded off trouble in five pregnancies. Case II points to threatened trouble indicated by the severe head symptoms with negative evidences from the urine and, with Case V, emphasizes this symptom and the hot, dry skin—relief coming when the skin and kidneys had their functions restored. Cases III and IV point to the necessity of careful dieting and the overloading of the stomach as an exciting cause—in the one case no albumen and in the other albumen only twice discovered prior to the development of convulsions. Where there is excessive eating, a hypernutrition is the result in a system in which there is already a hyperplastic condition of the blood. The attempt on the part of the kidneys to eliminate increased effete matter begets kidney irritation—it fails in its function and the appearance of albumen in the urine is the external manifestation of poisoning of the system by toxins, which, unless eliminated, result in an eclamptic explosion.

The patient's diet should be nutri-

tious, digestible, not rich; regular exercise in the fresh air and especial care of the bowels and kidneys.

The administration of saline cathartics should be frequent, making the mucous membrane of the bowels eliminative and derivative; an abundance of lithia water and other necessary diuretics, to stimulate the kidneys. If the patient shows evidences of anemia full doses of the tincture of the chloride of iron long continued will be of value.

The treatment of the case when convulsions occur, I believe, consists imperatively in free administration of chloroform and prompt bleeding, with active purgation if the bowels are constipated; nor should we forget that the welfare of the patient depends upon as prompt delivery as possible—by manual dilatation of the womb and forceps or turning. When, as in Case V, the patient remains unconscious after delivery, with symptoms of depression, as evidenced by rapid, feeble pulse, a hypodermic of strychnia nitrate will do much good by its action in sustaining the heart and diminishing cerebral congestion by its toning-up effect on the vaso-motor nervous system and at the same time sustaining the uterus in firm contraction.

I am convinced of the usefulness of morphia in conditions of rigidity of cervix in the first stage of labor—but, if there be symptoms of threatened eclampsia, it is positively contraindicated and should not be given in the treatment of the convulsions; it arrests secretion in the skin and kidneys and favors the retention of the effete materials in the system.

THE PARASITE OF WHOOPING COUGH.

M. KURLOFF (*Lancet*) remarks that Henke and Deichler have for the last ten years maintained that the cause of whooping cough is a very active organism provided with cilia. He challenges this statement, and believes that the micro-organism of whooping cough is not to be sought for amongst bacteria, but amongst the protozoa. He has never

failed to find active amoebae with finely granulated protoplasm and with spherical spores characterized by concentric lamination. He believes he has been able to follow the development of the spores into amoebae.

The facts he describes may all be observed in the fresh sputa of the patients, even without the employment of an Abbé's condenser.

ANTI-DIPHTHERITIC AND ANTI-STREPTOCOCCIC SERUMS.

THEIR NATURE, METHOD OF PRODUCTION, AND APPLICATION FOR THE RELIEF OF DISEASE.

By C. C. Fite, M. D.,
New York.

READ BEFORE THE LYCOMING COUNTY MEDICAL SOCIETY, WILLIAMSPORT, PA., DECEMBER 1, 1896.

THOSE of us who received our medical education long enough ago to be fond of retrospection will recall the ready acceptance which was given to the germ theory of disease, by the younger and more plastic minds in the scientific world when it was promulgated. We can also recall the doubt and ridicule that was heaped on the promoters of this theory by the over-wise and the ultra-conservative element.

It was my good fortune to witness the great Lister operate, and I noticed how his spray and apparatus excited the ridicule of some of these over-wise men who stood near; men who, by the way, have been forgotten, whilst Lister's name will live forever. Listerism, Pasteurism, antisepsis, asepsis, whatever name we may give to the methods then or since used, mean, after all, the same thing, namely, fighting noxious germs, killing the microbe that is, either by its own destructive action or through poisonous secretions, destroying humanity. All we have attained today in serum therapy comes legitimately from the establishment of the germ theory of disease.

Acting upon the suggestion of your honored associate, and my very good friend Dr. B. H. Detwiler, this paper will be limited to the question of the proper method of producing and using substances to either kill or neutralize the effect of disease germs. The subject is too broad for a full treatise on all the various accomplishments in this direction, and I will therefore select two that appear most interesting. I refer to anti-diphtheritic and anti-streptococcic serums. The first has been accepted as a part of our legitimate and definite list

of remedial agents. The second is still on trial.

As to the nature of anti-diphtheritic serum, I will state that the theory is a simple one. The diphtheritic germ, the Klebs-Loeffler bacillus, finds lodgment in the throat or elsewhere. It begins to grow and multiply, a membrane is formed, a poison is secreted and absorbed. This toxine overwhelms the life centers, paralysis and death may follow. Nature has in the meantime been endeavoring to overcome the danger that is threatening the patient, and has secreted an antitoxin to destroy the toxin.

Marvelous Mother Nature gives the germ a life, but when the balance is apt to be against the culture field, the body, endeavors to neutralize the danger in her own mysterious way. This process was repeated millions of times for thousands of years, but we did not understand it, did not go deep enough into Nature's great laboratory. Finally the educational results of the germ theory had produced a long list of careful thinkers, and with that deep eye, the microscope, and by the aid of vivisection on animals, the secret was discovered, and now, all over the civilized world, are laboratories for the production of the precious fluid.

From Lister to Behring is a long step. It represents energies untold, deep thought beyond our grasp. Only a few years as time is calendared, but a stride so immense as to strike us with awe! When I first met Professor Klebs, the thought passed through my mind—Lister—Huxley—Darwin—Spencer—Koch—Behring—Klebs—guide-posts in the development of life!

I am indebted to Dr. E. M. Houghton of the Biological Laboratory of Parke,

Davis & Company for the details of the method of manufacturing anti-diphtheritic serum. It is in brief as follows: First a culture medium is prepared by adding bouillon to blood serum, and then coagulating the mixture; this is known as Loeffler's blood serum. The diphtheria germs are secured by passing a sterile swab over the false membrane and the swab is then passed over the blood serum and the tube containing the now infected serum is closed with a cotton plug, and put into an incubator where it can be kept at the body temperature. After a few hours small colonies appear on the surface of the serum, and the microscope is used to determine if the Klebs-Loeffler bacillus is present and if so, if it is free from other forms of life. If it is a pure culture, small colonies are picked out and transferred to fresh serum and replaced in the incubator.

These growing germs are the seed used for producing the toxin; they are planted in sterilized beef bouillon. The germs then grow rapidly, and produce or secrete toxins which are retained in the bouillon. A small amount of a preservative is added and it is then filtered through unglazed porcelain, which removes the germs and all foreign bodies, leaving the solution clear. This solution of toxin is then injected into the jugular vein of a horse and as Dr. Houghton puts it, "We must now stand aside and allow the remainder of the miracle to be wrought unseen."

The horse's blood now contains an antitoxin which destroys the toxin we have been putting in it. The dose is repeated until, in the course of a few months, a horse can stand without injury a dose several hundred times stronger than one that would have killed him at the beginning of the treatment. Our horse is then our laboratory, but Nature has yet kept her secret as to how the antitoxin is produced. All we have to do now is to secure the blood from our patient friend, remove the clot, filter, sterilize and preserve the serum, and we have the result, a package of anti-diphtheritic serum, and we are ready to go on our life-saving errand.

I have purposely avoided any reference to the various methods and tests applied on guinea pigs and with the microscope to determine the strength of the toxins and antitoxins from time to time. The methods have been carefully worked out by those engaged actively in the work, and in this way they have been enabled to establish a fixed standard just as definitely as we could weigh any given drug with the scales. The method now generally in use is to make a given number of antitoxin units a dose, irrespective of the bulk.

I consider it of the utmost importance that the serum should be as highly concentrated as possible, hermetically sealed, and only one dose in a package, and it should not be opened until we are ready to use it. By being careful about this, and using a clean syringe, avoiding the large old-style antitoxin syringe with the rubber tube, we can be confident that no harm will come from its use. My opportunities for observing the use of anti-diphtheritic serum and for conferring with eminent authorities as to its use have been quite extensive, and I have reached the conclusion above given and also that it is of the utmost importance to use the serum as early as possible and in full and repeated doses.

In recent conversations with Dr. Joseph Holt, Dr. W. P. Northrup, and Dr. Joseph O'Dwyer, they have referred pointedly to the necessity of full doses. In fact, I think it is legitimate to add that the majority of those who have not been successful in their use of antitoxin have either not used it in sufficient quantity or early enough. Dr. W. A. Walker (*Pediatrics*, October 15, 1896) places great stress on this point, as also does Dr. Douglas H. Stewart (*Annals of Gynecology and Pediatrics*, November, 1896).

Allow me to make a brief digression here and refer to the value of using the microscope in making a diagnosis. Dr. Wm. Osler kindly showed me a case of typhoid fever in his service at the Johns Hopkins Hospital which had a small patch of false membrane on the lower lip. Microscopical examination showed the Klebs-Loeffler bacilli in abundance.

Now it is often doubtless true that the real nature of cases of this kind are overlooked, and they become the foci of infection, and the patch, even though small, may spread to other surfaces later on, after having been the means of infecting probably a number of people. Then we are sure to hear the cry raised about sporadic cases!

I would also ask you not to neglect other methods of local and general treatment; sustain the patient's strength, keep the bowels open with calomel and keep the throat clean. The Loeffler solution is an admirable combination of antiseptics for local use.

I will now refer to the cases of mixed infection and will ask your attention to the articles of Dr. Stewart and Dr. Walker above referred to; also to an editorial in the *Cincinnati Lancet-Clinic* of October 15, 1896, referring to the use of anti-streptococcic serum and quoting that eminent teacher Dr. J. Lewis Smith.

Marmorek and others have used anti-streptococcic serum in cases of diphtheria showing the streptococcus as well as the Klebs-Loeffler bacillus, also in scarlet fever, puerperal fever, general septicemias, infective tonsillitis, erysipelas, and other diseases, whether due to, or complicated by, the appearance of the streptococcus pyogenes, and it seems as if it will prove of great value in other cases, perhaps in multiple abscess and in broncho-pneumonia, or in fact wherever the streptococcus is found as above stated. Dr. Henry Dwight Chapin has been giving some attention to its use in the two diseases last named.

In reference to its use in diphtheria, I am firmly convinced that it is indicated in all cases where the microscope shows the streptococcus and we almost invariably find it in cases which do not yield to the anti-diphtheritic serum and where we see a zone of inflammatory action extending beyond the area occupied by the true diphtheritic membrane. Therefore, if a case does not yield promptly to the anti-diphtheritic serum, we should, I believe, use the anti-streptococcic serum without waiting for the report from the bacteriologist.

The method of producing the anti-streptococcic serum is in the main a similar process to that used in the production of the anti-diphtheritic serum, or by injecting virulent cultures of the germs instead of the toxin.

I am indebted to Dr. Charles T. McClintock of Ann Arbor for advice in regard to this matter. Dr. McClintock writes as follows: "As regards the difference in methods for producing anti-diphtheritic and anti-streptococcic serum, I may say in general that the streptococcus, like a number of other germs, does not readily give off its toxin to the surrounding liquid. If you want to get the toxic properties of the germ, you must take its own protoplasm. On this account we are compelled to use the germs themselves, in order to successfully immunize an animal. The filtered toxins are not very powerful. This is the essential difference between the two materials. In the case of the streptococcus we use a living virulent germ in bouillon culture."

I submitted the same question to Dr. Dillon Brown of New York, and he replied as follows: "To test the value of a streptococcus antitoxin we must not use the toxin; but the culture itself. The point is that in streptococcus infection, the germ itself finds its way into the blood and viscera, while in Klebs-Loeffler infection, the bacillus is rarely found in the viscera on autopsy. In one case, you have a toxin only to fight, and in the other, you have both the germ and its toxin."

There has been a great deal of good work done quite recently in this investigation of the anti-streptococcic serum and I feel confident that we are near a solution of the problem. The New York Board of Health is having it carefully studied in the Willard Parker Hospital and the great reputation and well-known ability of the scientific corps of this board and of the gentlemen composing the staff of the hospital is a sufficient guarantee that the work will be well done. The profession of this country owes much to Drs. Biggs, Park and Prudden.

In conclusion, allow me to say that

the great lesson we may learn from the history of serum therapy, bearing upon scientific advancement, is that we should keep our minds open to receive testimony and look forward, not backward. We are at the beginning only of a great era in medicine. Medicine is partly a science, partly an art. The laboratory worker and the student are the

scientific producers of the colors which the practitioner, the artist, puts on the canvas. If we work together, the one investigating and producing, the other investigating and using, we make more rapid strides, get quicker results, and mutual confidence produces mutual good-will and a cheerful exchange of ideas of advantage to all.

PATHOLOGY OF MULTIPLE SCLEROSIS.

In the *Lancet* an abstract of a very important paper by Professor Strümpell is published on this subject. The etiology of many nervous diseases has in recent years, he says, been successfully investigated, yet about such a common disease as multiple sclerosis little or nothing is as yet known for certain. Marie's view that it is in most cases a sequel of acute infectious disease can scarcely be maintained, for whereas in many cases of acute infectious disease multiple inflammatory foci in the central nervous system occur as a sequel, in thirty or forty cases of his own of multiple sclerosis there could only be found an occasional one in which there seemed to be some possible connection between a preceding infectious disease and the condition referred to. Indeed, in his last twenty-four cases, in not a single one could any such relation be traced. And so it is also with reference to the toxic origin suggested by Oppenheim and others. No doubt where the patients are dwellers in towns and work in metals, etc., the incidence of the disease may suggest some such connection. But in places such as Erlangen, in which the patients are for the most part peasants or country dwellers, such a view fails to find any support. Nor can the vascular origin of the sclerotic foci be regarded as likely.

It is generally conceded that multiple sclerosis has no connection with syphilis, and it is not easy to understand why certain small vessels in the nervous system only should become diseased in some unknown manner, while similar vessels elsewhere are unaffected. Professor Strümpell's suggestion is that

multiple sclerosis may depend upon some congenital abnormalities in the nervous system. This view was suggested to him recently by a case which he published and in which there were combined a marked condition of hydromyelia, central gliosis, and multiple sclerosis. He had previously observed a case of hydromyelia with multiple sclerotic foci.

Further points in support of such a view are that it is a disease of early life (the first symptoms can often be actually traced back to childhood) and that the axis cylinders are so long spared. It is further suggested that the change may occur first in the neuroglia and that there are foci where it undergoes proliferation—a condition, indeed, of multiple gliosis—whose origin is to be sought in some congenital peculiarity.

Professor Strümpell, in concluding his paper, directs attention to two conditions in the symptomatology of the disease. First, as to the character of the disordered movement, he believes it does not essentially differ from the ataxy of tabes, and, secondly, he finds that the abdominal reflex is very frequently absent. This view as to the etiology of multiple sclerosis is extremely interesting. There are few objections of much weight to be offered to it, but, of course, it can only be confirmed or refuted after careful and prolonged examination of many cases in various ways.

ICHTHYOL IN GONORRHEA.

CANOVA (*University Medical Magazine*) recommends in gonorrhea of the female injections of a one-half per cent. solution of ichthyol.

Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

SEMI-ANNUAL MEETING HELD AT HAGERSTOWN, MD.,
TUESDAY AND WEDNESDAY, NOVEMBER
10 AND 11, 1896.

TUESDAY, NOVEMBER 10, FIRST DAY. P
EVENING SESSION.

Dr. William Osler related A CASE OF DIFFUSE SCLERODERMA, WITH EXHIBITION OF PATIENT. This patient, a white man, aged 30, came under my care on the 14th of last March. He has a progressive thickening of the skin; a condition known as diffuse scleroderma. It is chiefly in the extremities and on the face. It is noticeable in the remarkable thickening, induration and gradual immobility of the skin. In the progressive case ordinarily the fingers become eroded and finally completely disabled. This man's disability is considerable. He can not close his fingers sufficiently to make a fist and can not pick up small objects. The disease has begun in his face. You can see that the cheeks are somewhat hide-bound and the skin hard and firm. The wrinkles are somewhat smoothed out, though the skin of the forehead is not yet involved. It is most marked in his hands, which are cold; and upon grasping his hand it feels like marble or a hand molded in wax. In attempting to pick up the skin you find that you cannot pucker it at all. Two groups of these cases are recognized, the local and the diffuse scleroderma. It is a tropho-neurosis, the etiology is not known and its pathology extremely obscure. It is stated that cases have recovered under thyroid extract; some recover spontaneously.

This patient has improved somewhat under the thyroid treatment and is still continuing it. He says that he is able to use his hand better than a few weeks ago. He is unable to lift his shoulders much because of the hide-bound condition of his chest. It is a very slow progressive disease and we hope that perhaps in this case it may be arrested, if not cured. It is an exceedingly rare affection, and I was in practice nearly 20 years before I saw a case. It is

rarely seen even in the large clinics of Europe. Four years ago we had the first case in the Johns Hopkins Hospital, and since that time I have seen five. One of these was a woman from Virginia, who had the disease in an extreme form. The tips of her fingers were eroded, the face so completely drawn that she could not move any of the muscles and the skin of the upper lip stretched tightly across her teeth. Her physician had to remove one or two teeth in order to feed her. She gradually sank and died. I have at present three other cases under observation, all upon the extract, but this is the only one that has shown any signs of improvement. One of them, a gentleman, has a singular feature to the disease. So long as he is recumbent the legs are of a natural color, but as soon as he gets up the legs become purple almost to the waist. It is a vaso-motor change. The disease is more common among men than among women.

Dr. Simon Flexner then made some remarks on the PATHOLOGY AND BACTERIOLOGY OF TYPHOID FEVER. (See page 145.)

Dr. William Osler: This is a disease that is entirely preventable. It is an index of the sanitary intelligence of the people and the physician of any district. It could be stamped out in this State within three years with the intelligent coöperation of the politicians. I would like to hear from Dr. Fulton as to what he thinks should be done in order to secure proper measures for the stamping out of this disease in Maryland.

Dr. John S. Fulton, Secretary of the State Board of Health: In the short time that I have had charge of the sanitary matters in this State I have made one observation, that is, that the country-bred bacillus is a popular germ in the city, and the Baltimore germ the popular one in the counties. The State Board of Health permitted me recently to address letters to 56 doctors, from whom I received 23 replies on this subject. There was much argument from the counties to prove that all the cases of typhoid fever in their vicinity came directly from a case or cases that arrived

from Baltimore, and, on the other hand, from a half dozen in the city there was argument to show that all the cases in the city came from outside districts. This is a more important observation than at first appears. For the reason that no good results can be obtained so long as these gentlemen maintain their respective opinions. I have also discovered that probably the major portion of the typhoid fever that exists in the State today is hidden under the name of typho-malaria. It is not necessary to discuss whether there is such a thing or not, but there are arguments against it that might be mentioned. It is generally considered that this is a fever between the two and having some of the symptoms of each. While that would seem to mean that you have malaria grafted upon a typhoid case, or, *vice versa*, it is yet said to be a less serious affection than either one of these diseases alone. This seems to me an argument against the existence of typho-malaria. In one of the most important medical centers in this country a recent report (Bellevue Hospital) shows sixteen cases of typhoid fever with a mortality of sixteen, and seventy-six cases of typho-malaria with no deaths. Now, these men are between the horns of a dilemma. Either their diagnoses were bad, or their treatment simply murderous. Typho-malaria used to hold a position somewhere between typhoid and malaria. I find that the acme of typho-malaria and that of typhoid always occurs either in October or November. Now, the line of intermittent fever always reaches its acme either in June, July or August. It was found that a general dissemination of knowledge, the improved methods of diagnosis and better sanitation in that State caused the malarial line to instantly approach that of typhoid fever, until in 1890 the two lines touched. In 1891 the typho-malarial curve dropped and remains now below that of typhoid fever; it shows that as the years have gone by the authorities of Michigan have been putting typho-malarial fever out of existence. The Board of Health will in a few years make an extended inquiry as

to the amount of typhoid in the State of Maryland, and I hope the replies will be particularly full as to the question bearing on typho malarial fevers. I ask the cooperation of all present and trust you have no prejudices in favor of either Baltimore or country-bred bacilli.

Dr. Wm. B. Canfield made some remarks on the MODERN METHOD OF EXAMINING URINARY SEDIMENT. He said that as a rule the chemical examination of urine was not difficult, but the finding of the sediment was not so easy unless it was especially abundant. When the sediment was scarce or apparently absent important ingredients may be overlooked. The method of allowing the urine to stand in a conical glass has some disadvantage, especially in warm weather when decomposition may occur, also casts may remain suspended and often adhere to the sides of the glass and escape observation. Moreover, this method of examination involves a waste of time; for this reason he would advocate the more general use of the centrifugal. The centrifugal machine has been long known and used, for example, in sugar refining, and also in many physiological experiments, but only of late has a smaller and portable machine been made which can be easily used. When put upon the market it was surprising to find so little mention of the use of this machine, in even the most modern text-books on urinary analysis, and he also thought that with the exception of the larger hospitals and a very few physicians the centrifugal was still a mystery. He then exhibited the machine which he has used and demonstrated the method employed.

Dr. J. M. T. Finney then made some remarks on the use of the X RAYS IN SURGERY. Messrs. Arnold and Smiles of the Edison Company first explained the use of the machine and its simplicity as put out by the Edison Company. He explained the advantage of it in diagnosing dislocation or fracture or other deformities made visible by it and suggested that by the use of photographs, which could be easily taken in the light without a lens, that the surgeon could keep a complete record with illustra-

tions of every case adaptable to the machine and thus protect himself against malpractice suits. In conclusion, Dr. Finney related some cases and explained the advantages of the machine from a surgical standpoint. After this there was a general discussion and demonstration of the X rays machine of various cases which had been brought in by local physicians.

SECOND DAY,
WEDNESDAY, NOVEMBER 11.

Dr. Frank Martin then read a paper on CANCER OF THE TONGUE, in which he described the character of the growth usually present as epitheliomatous; the age most prevalent 45 to 68, the length of time it took the growth to develop, six months to three years, and the various operations for its removal. He said that the symptoms at first were very undefined with very little pain; it usually begins on the side of the tongue and in its anterior half and the duration of life without operation had been recorded as one year to eighteen months. He spoke of the various operations such as that done with tracheotomy with an incision in the jaw and with operation through the mouth; he found that the operation by incision in the jaw bone gave the most complete results and in his experience the wound healed kindly.

Dr. J. M. T. Finney: During the last six months I have had an opportunity to operate upon three cases in which the entire tongue was removed for cancer. The recommendation for the Cooper operation, which was described, is that the wound can be kept entirely aseptic. In our experience this was not so for the reason that the wound communicates at all times with the mouth, and it is hence impossible to keep it clean. The constant dribbling of the saliva will render it unclean in a very short time. In two of our operations a combination of several methods was used and proved very satisfactory. The objection to Langenbeck's operation is the failure of the jaw to unite. I have had no experience with it personally. In my last two cases preliminary to the removal of

the tongue I operated upon the glands, removing the sublingual, the submaxillary, and then closed the wound. The linguals were tied at the same time. A strong ligature was passed through the tongue then and this organ excised by a strong pair of scissors. This operation proved entirely satisfactory. The first patient was a man 72 years of age. He was in the hospital two weeks and a half and then returned home with the wound, a perfectly clean, granulating one. The second case was even, if not more, satisfactory. He was a young man and returned home in two weeks after the operation. After Cooper's operation it takes perhaps months for the wound to heal up.

Dr. Martin: In the operation suggested by Dr. Finney it seems to me that in taking out the infected structures, closing the wound and removing the tongue are another operation. There is a certain territory at the back of the floor of the mouth which is left to become the seat of a new growth. Cooper's operation does leave a long standing wound to close up, but in my last case the closing occurred in three weeks.

Dr. Finney: I could not find any observations on this question as to whether these intervening tissues become involved. It is a recognized fact that it is more liable to take place in the glandular structure rather than in the tongue when recurring. Whether the intervening tissues become involved at all, or in what proportion of cases, I could not find out. Surely 75 per cent. of the recurring growths I think are in the glandular structures, and, if so, just that proportion of cases would be cured by this operation.

Dr. J. W. Humrichouse of Hagerstown read a paper entitled SOME OF THE RESULTS OF BACTERIOLOGICAL RESEARCH.

Dr. David F. Unger of Mercersburg, Pa.: I am very much interested in the remarks about antitoxine, and would like to ask what progress has been made in its use. About a year ago we considered the subject before the Franklin County Medical Society and Dr. Welch's paper on this subject was up for discussion. Has Dr. Humrichouse any sta-

tistics showing the result of the use of this remedy, and whether it is advisable to use it?

Dr. Humrichson: I have not the statistics at hand, but I think the proper thing to do is to use it surely. This week I have used the remedy twice with no more reaction than would be the result of a hypodermic use of any sterilized liquid.

Dr. Osler: Those who are not convinced by the report of the American Pediatric Society upon the efficacy of this remedy are perhaps worse than Dives. They will hear neither Moses nor one of the prophets, nor would they be persuaded though one rose from the dead.

Dr. Randolph Winslow reported A CASE OF GASTROSTOMY FOR ESOPHAGEAL OBSTRUCTION.

Dr. Joseph E. Gichner spoke of THE PRESENT STATUS OF THE TREATMENT OF TUBERCULOSIS.

Dr. H. O. Reik read a paper on THE PRACTICAL USE OF SKIASCOPY. (See page 109.)

Dr. E. Tracey Bishop of Smithsburg presented a patient who had an immense tumor of the right side of the neck and hanging down over the chest.

Dr. Randolph Winslow (examining patient): This tumor is freely movable, hard in some places and very soft in others, probably contains some fluid; has been in existence the patient says for eighteen years. It has no pedicle and is not connected with the deep structures. It feels at some points as though it might contain bone. I should say, without knowing anything more about it and without microscopical examination, that it is a fibroma, or fibroenchondroma. I think it could be removed without much danger.

Dr. Finney: I should quite agree with Dr. Winslow. It is too low down to be a parotid tumor. We had a case similar from this county last week, which proved to be a molluscum fibrosum. I would advise its removal.

Dr. Finney then exhibited a patient, who had undergone amputation at the hip, saying: Amputations of the hip joint are sufficiently rare to excite in-

terest when they occur. This patient was operated upon in August last. His illness begun three years ago, about which time he fell on a rock. Six months later he began to have pain which lasted for several days, then disappeared. He supposed this attack was rheumatism and did not notice any enlargement of the limb for some time, probably a year later. The new growth became more painful and at the end of the year the pain was constant. Last June he went to Philadelphia to the Jefferson Hospital and states that he was there operated upon twice, but does not know the nature of the operations. There was a scar as if an incision had been made into the growth. He remained in the hospital six weeks, but after his return home the growth began to increase very rapidly and three weeks later he came to the Hopkins Hospital. The femur seemed to be considerably involved and was painful to the touch, particularly over the inner condyle. The knee was slightly flexed and had very little motion. A diagnosis of sarcoma was made. His condition was fair, not very good, but as pain was so great we thought it best to operate at once. The method employed was one of the typical ones, but, as I thought it best to save as much blood as possible, I performed a preliminary ligation of the vessels just above Scarpa's triangle. I carried my incision down far enough to get plenty of tissue, then made a circular cut and enucleated the head from its socket, destroyed the cartilage of the socket and closed the wound without any drainage. The hemorrhage was insignificant and shock very slight. I gave him the subcutaneous salt solution injection, although his pulse was as good as when we started. He made a good recovery without any reaction whatever. He was in the hospital three weeks; has had no trouble since except the sensation in the toes which always follows in amputation. About the third day his pulse went up to 160 and his temperature to 102 degrees without any cause that we could discover. We simply employed expectant treatment and it came down and remained normal.

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MARYLAND MEDICAL JOURNAL,

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BALTIMORE, DECEMBER 19, 1896.

FROM the large number of physicians who were present at the highly interesting ceremonies on the occasion of *The Frick Library Dedication*, the formal dedication of the Frick Library of the Medical and Chirurgical Faculty, it seems almost superfluous to record the particulars of that important event.

Soon after moving into the new building of the Faculty enterprising members began to think of plans by which the benefits of the Faculty and its library might be enhanced and extended. The first step was the formation of the Book and Journal Club, through which many new books and journals have been added to the shelves.

Then the present president evolved the happy idea of interesting prominent citizens in the needs of the Faculty, and through his endeavors the Frick brothers gladly endowed what is now called the Frick Library, which was formally opened last week. Mr. Reverdy Johnson, an intimate friend of the late Dr. Charles Frick, has also promised the library one hundred dollars a year.

The full programme of the exercises held last week will appear later, but suffice it to say at present that the addresses and remarks were most fitting and appropriate to the occasion. After a statement of the condition of the whole library as well as of the Frick endowment by the president, Dr. Osler, Dr. Samuel C. Chew, a life-long friend of Dr. Frick, delivered an ornate and scholarly address on the life and work of Dr. Charles Frick. This was followed by remarks from Mr. Reverdy Johnson of the Baltimore Bar paying a high tribute to his personal friend Dr. Frick and at the same time presenting to the library a copy of Dr. Frick's most important work on Renal Affections, the very copy which Dr. Frick had presented to him with his autograph when it appeared.

Then followed remarks by Dr. J. M. DaCosta of Philadelphia and Dr. J. D. Bryant of New York on the value of libraries to the profession and an enumeration of the principal medical libraries of the world. In these addresses due credit was given to Dr. James R. Chadwick of Boston, whose stimulating oration almost a year ago was the means of raising so much money towards the new building. After the exercises were completed the members withdrew to the hall below, where an ample collation was served.

To the president, Dr. Osler, and to the trustees, too much praise cannot be given for the great strides made by the Faculty in the past year. The trustees, with Mr. W. F. Frick and a few other invited guests, twenty-two in all, were entertained by Dr. Osler at a most elaborate luncheon at the Maryland Club at two o'clock. Later the visiting guests and others took dinner with Dr. Osler at his house, and at night the members were the guests of the Faculty.

The good work which has begun so auspiciously should not be allowed to stop here and it is hoped that other public-spirited and influential citizens may feel sufficiently grateful to the medical profession to add still further to the present endowment and make the Faculty a wealthy and powerful body. Meanwhile every available physician in the city and State should be enrolled on the membership list.

Thus the strength which comes from such a solid union will not only command the respect of all good citizens but will be all powerful when important questions come up

which demand the support of the city and State governments.

The total yearly income for books and journals, in addition to what is appropriated from the general fund of the Faculty, is thus about \$700; \$500 from the Book and Journal Club, \$100 from the Frick brothers and \$100 from Mr. Reverdy Johnson. The \$1000 which was first given by the Frick brothers was spent in furnishing the Frick Library.

* * *

FOR the first time in the history of this State a midwife was convicted and fined for neglecting to report to
A Good Law Enforced. some physician or to the Health Commissioner the diseased condition of the eyes of a newborn infant.

It was only after much hard work and frequent visits to Annapolis that the committee in charge of the bill, the object of which was to reduce the cases of ophthalmia neonatorum and blindness, succeeded in having passed in 1894 a law which was for the benefit of the ignorant. Such a law had been in force for two years and only within the past few weeks was the first midwife caught and punished. Owing to the novelty of the law and the apparent or feigned ignorance of the woman in attendance the punishment was as mild as possible, but it will likely have a good effect in arousing other midwives to do their duty.

It is unnecessary to quote statistics to show how large a proportion of blindness is due alone to neglect of the eyes in the first few days of life and the great efficacy of Credé's method. The full history of this case with the simple yet comprehensive law is here given.

Physicians should make it their duty not only to examine, treat or report all cases, but should warn midwives with whom they come in contact of the dangers of neglect and, what is more effective, of the extreme penalties which may be inflicted. The following is an authentic account of the case with the law attached:

The first trial for violation of the law enacted by the legislature of 1894, "To prevent Blindness in Infants," took place on Friday, November 26, before Justice Leyshon of Canton. The prosecution was conducted by Dr. John S. Fulton, Secretary of the State Board of Health, upon information furnished him by Dr. Hiram Woods of Baltimore. It developed

in the trial that the infant, daughter of Henry and Pauline Seitz of Highlandtown, was born in April under the care of a Mrs. Liersman, registered midwife. The child's mother testified that when purulency appeared on the fourth day, the midwife assured her it meant nothing serious, made no suggestion of the propriety of calling in a physician, advised the application of warm chamomile tea, and breast milk, and herself applied these remedies. When the baby was brought, in July, to the Presbyterian Eye, Ear and Throat Charity Hospital, both corneas were sloughed. The case came under Dr. Woods' notice early in November. Mrs. Liersman, in her own behalf, stated that she had washed the child's eyes regularly and had advised Mrs. Seitz to summon a physician. She acknowledged having received from the Health Office of Baltimore a copy of the law and of the circular letter, sent through this office some time ago by the Committee on Prevention of Blindness of the Medical and Chirurgical Faculty. This letter gave directions concerning the care of infants' eyes and dwelt upon the dangers of ophthalmia neonatorum. She said that she understood the law to require the reporting of cases of children born blind. The justice adjudged her guilty and imposed a fine of \$25 and costs. The law is as follows:

AN ACT TO PREVENT BLINDNESS IN INFANTS.

"*Section 1.*—Be it enacted by the General Assembly of Maryland: That if at any time within two weeks after the birth of any infant one or both of its eyes, or eyelids, are reddened, inflamed, swollen, or discharging pus, the midwife, nurse or person other than a legally qualified physician, in charge of such infant, shall refrain from the application of any remedy for the same, and shall immediately report such condition to the Health Commissioner, or to some legally qualified physician in the city, county or town wherein the infant is cared for.

"*Sec. 2.*—And be it enacted, That any person or persons violating the provisions of this Act shall, on conviction, be punished by a fine not to exceed one hundred dollars, or by imprisonment in jail not to exceed six months, or by both fine and imprisonment.

"*Sec. 3.*—And be it enacted, That this Act shall take effect from the date of its passage.

"Approved April 6, 1894."

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending December 12, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		18
Pneumonia.....		25
Phthisis Pulmonalis.....		
Measles.....	2	
Whooping Cough.....	4	1
Pseudo-membranous Croup and Diphtheria. }	26	8
Mumps.....	1	
Scarlet fever.....	29	1
Varioloid.....		
Varicella.....		
Typhoid fever.....	6	3

Berlin now has a professor of massage.

The Loomis Sanitarium in New York State is open for patients.

There are many cases of diphtheria at Princeton, New Jersey.

By the will of the late Gabriel D. Clark the Nursery and Child's Hospital receives \$500.

Texas is much pleased with the Maryland Medical Law and is trying to have one like it.

The physicians of Santa Clara County, California, have agreed to abstain from lodge or contract practice and to abolish cut rates.

Typhoid fever is said to be prevalent in Howard and Carroll Counties, Maryland, especially near Woodbine.

Philadelphia physicians deserve credit for already having begun arrangements for the semi-centennial of the American Medical Association next June in that city.

Dr. W. G. Damm of 1404 William Street, Baltimore, advertises in the "Personal" columns of the daily press that his professional advice and medicine are given for fifty cents cash. Dr. Damm is a graduate of the Baltimore University School of Medicine in 1890.

Dr. T. More Madden has received from the Royal University of Ireland the honorary degree of M. A. O. (Master of the Obstetric Art). Dr. Madden is Obstetric Physician and Gynecologist to the Mater Misericordiae Hospital and Consulting Physician to the Chil-

dren's Hospital and has written extensively on obstetrics and gynecological subjects.

Dr. E. R. Bishop, assistant physician at the Sheppard Asylum, has resigned. Dr. Bishop contemplates studying in Europe. The resignation will be acted upon at the next meeting of the Board. Dr. Bishop has been efficient in the discharge of his duty and is highly esteemed by the Board.

Dr. Leonard J. Sanford, late Professor of Anatomy and Physiology at the Yale Medical College, New Haven, Connecticut, died at his home last Sunday. Dr. Sanford was born in New Haven in 1833 and was graduated from Jefferson Medical College, Philadelphia. He was a member of the American Medical Association, American Academy of Medicine and other societies.

The third annual session of the American Academy of Railway Surgeons was held at Chicago, September 25, 1896. The following officers were elected: President, Dr. L. E. Lemen, Denver; Vice-Presidents, Dr. M. C. M. Gardiner of San Francisco, Dr. R. Ortega of Diaz, Mexico; Secretary, Dr. D. C. Bryant, Omaha; Treasurer, Dr. C. B. Kibler, Corry, Pa.; Editor, Dr. R. Harvey Reed, Columbus, Ohio.

The following contracts with hospitals and dispensaries of Baltimore will probably be renewed for the coming year: Nursery and Child's Hospital, \$3700; Woman's Medical College Free Dispensary, \$500; University of Maryland Free Dispensary, \$1000; Dispensary of the Dental Department of the University of Maryland, \$500; Southern Homeopathic Medical College Free Dispensary, \$800; Southern Free Dispensary, \$1000; Baltimore College of Dental Surgery Free Dispensary, \$500; Provident Hospital Free Dispensary, \$800; Northeastern Free Dispensary, \$1200; Maryland Homeopathic Free Dispensary, \$800; Evening Dispensary for Working Women and Girls, \$700; Eastern Free Dispensary, \$1800; College of Physicians and Surgeons Free Dispensary, \$1500; Baltimore University Free Dispensary, \$1000; Baltimore General Free Dispensary, \$1800; Baltimore Medical College Free Dispensary, \$1200; Baltimore Eye, Ear and Throat Charity Hospital Free Dispensary, \$500. These contracts are annually made between the city and these institutions in return for the latter's treatment free of direct charge to the poor of the city.

Book Reviews.

SECRET NOSTRUMS AND SYSTEMS OF MEDICINE. A Book of Formulas, compiled by Charles W. Oleson, M. D. (Harvard). Sixth Edition. Revised and Enlarged. Chicago: Oleson & Co., Publishers, 35 Clarke Street. 1896.

This deservedly popular book has reached its sixth edition in a short time. When one reads the actual value of some of these compounds and what is paid for them the conviction is firmer than ever that we mortals are fools. This little book does a still further good work by exposing those proprietary productions containing such harmful ingredients as alcohol, morphia and cocaine. The author's object is to collect in one book what is known of these secret remedies, knowing full well that their value lies in this secrecy. He bears testimony to the good work of Frederick Stearns & Co., Detroit, in helping to expose these harmful compounds. Some analyses are only relative and not exact. His analysis of Hunyadi Janos water does not correspond to the *Lancet's* analysis, but is near enough for all practical purposes. Every physician should be acquainted with the preparation of secret remedies, else how can the great harm done by such preparations be combated? The author has issued a commendable work.

THE MEDICAL NEWS VISITING LIST FOR 1897.

In one wallet-shaped book, with pocket, pencil and rubber. Seal grain leather, \$1.25. Philadelphia and New York: Lea Brothers & Co.

THE MEDICAL RECORD VISITING LIST AND PHYSICIANS' DIARY FOR 1897. In black or red morocco leather, with flap, \$1.25 and \$1.50. New York: William Wood & Co., Publishers.

THE PHYSICIANS' VISITING LIST (Lindsay & Blakiston) FOR 1897. Forty-sixth year of its publication. Sold by all booksellers and druggists. Philadelphia: P. Blakiston, Son & Co. 1012 Walnut Street.

These lists differ little from those of last year except in the date. The *Medical News* List is better bound than the other two, while the *Medical Record* List has the most flexible covers and the best paper. The Physicians' List seems to be the most popular, although the binding is not especially good and the pocket rather poor. A physician would hardly go wrong in buying any one of these. The Physicians' List is the least bulky.

Current Editorial Comment.

PHYSICIANS AND POLITICS.

Charlotte Medical Journal.

It is the privilege, and indeed the duty, of the physician, in common with all American citizens, to take part to a certain extent in the affairs of government, national, State and local. He no doubt should give such attention to matters of legislation which affect him, as well as all others, as to be able to cast his ballot intelligently. It would seem, however, that a note of warning may not be amiss, lest the doctor should degenerate into the ward politician and find himself immersed deeply in the muddy pool of politics.

SLOW PHILADELPHIA.

Medical and Surgical Reporter.

IN many cities the pace of advancement in matters sanitary has been set by the city fathers. In Philadelphia, unfortunately, the converse seems to be true. The powers that be act as a clog on whatever spirit of progress is shown by the public. All that has been gained has been at the expense of long and persistent demand and there is not the slightest doubt but that in the matter of sanitation alone many valuable lives have been sacrificed to imperfect conditions, long after the demand for the change of such conditions has been made.

KLEPTOMANIA.

Journal of the American Medical Association.

KLEPTOMANIA, as a system of mental disorder, has long been recognized by alienists. Marc, who reported many cases half a century ago, recognized that people, in circumstances which should have placed them beyond temptation, stole from shops articles to them almost valueless, whose number and uselessness indicated mental disorder in the thief. According to many alienists, kleptomania is always a manifestation of degeneracy, an episodic symptom-complex. There are kleptomaniacs of this type who steal purely for the sake of stealing. At the same time, as Lacassagne points out, in the vast majority of kleptomaniacs, kleptomania is a morbid manifestation of certain neuroses and psychoses rather than a psychosis by itself. In many cases of so-called kleptomania, stealing is a manifestation of viciousness or feeble morality. Kleptomaniacs steal, but not all thieves are kleptomaniacs.

Publishers' Department.

Convention Calendar.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY**. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC**. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. Mrs. M. H. ANDERSON, 1st Vice-President. Mrs. MARY F. CASE, Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY**. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

S. L. REED, M. D., Highland Park, Ky., October 28, 1896, writes: Have only time at present to copy notes in reference to cases in which I used Bromidia. Was called suddenly early on morning of June 10, to see Mrs. McG. Patient had been under treatment of Dr. R., who had been called but failed to answer. Found patient suffering with acute mania, very violent and destructive. On questioning family found patient had delivered herself four days previous of a three months' fetus. Since that time patient had been receiving enormous doses of morphine with no apparent result. As patient was beyond control, improvised a straight-jacket of her husband's sweater and bicycle belt. Ordered half ounce Bromidia (Battle & Co.) every half hour until quiet. In two hours patient was sleeping. Patient continued to receive Bromidia whenever indicated, along with other treatment, and in a few weeks was apparently well, although Dr. R. still has her under observation. This will show the superiority of Bromidia over morphine, especially in cases with head symptoms. I have had moderate success with Iodia, but could sing the praises of Papine in several columns if I had the time.

PARTURITION.—In the incidental management of the lying-in room, Listerine is very grateful to the patient. Bathe the face and hands, in fact all parts of the body, in a weak solution (say an ounce to pint of water). Used as a mouth wash, especially before meals, it is refreshing and appetizing; and, taken internally, removes all fetor arising from the stomach or mucous tracts. Sprayed about the room and bedclothes by a simple atomizer, it purifies and sweetens the atmosphere. As a prophylactic and restorative douche or injection after parturition, an ounce or two ounces of Listerine in a quart of warm water is all-sufficient. Where stronger solutions are indicated, Listerine may be used in larger proportion—one ounce of Listerine, one ounce of glycerine and two ounces of water is a prescription frequently written. Listerine forms an excellent and very effective means of conveying to the innermost recesses and folds of the mucous membrane that mild and efficient mineral antiseptic, boric acid, which it holds in perfect solution.

MARYLAND MEDICAL JOURNAL

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Original Articles.

CHARLES FRICK, M. D.

COMMEMORATIVE ADDRESS DELIVERED AT THE OPENING OF THE FRICK LIBRARY OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, DECEMBER 10, 1896.

By Samuel C. Chew, M. D.,

Professor of the Principles and Practice of Medicine and Clinical Medicine, University of Maryland.

MR. PRESIDENT, GENTLEMEN OF THE MEDICAL AND CHIRURGICAL FACULTY, GENTLEMEN OF THE MEDICAL AND LEGAL PROFESSIONS OF BALTIMORE AND OF OUR SISTER CITIES, OUR HONORED AND MOST WELCOME GUESTS :

We have met together this evening for a two-fold purpose, the commemoration of an honored member of our profession and of this Faculty, Dr. Charles Frick, and the inauguration of a new department of our Library ; and these two objects are yet but one, for the books, upon the possession of which, through the munificence of Dr. Frick's brothers and of Mr. Reverdy Johnson, we enter today, are for a memorial, and a most fitting one, of the man whom we commemorate.

Very few of the present members of this Faculty knew Dr. Frick, for the average length of the active life of a generation has been more than fulfilled since he ceased to live and move among us, and a new generation of physicians has come upon the stage. But there are some who knew him well and count their knowledge of him among the most delightful of their experiences in life; and, although he was considerably my senior, so that when I was just entering upon my professional course he had already attained to middle life, yet there were many circum-

stances which brought me into close and intimate personal and professional relations with him.

Those of us who knew him thus well will always cherish his memory with a mingled feeling of admiration and of love. While that feeling could never fade from our minds, there is perhaps a special reason for evoking and reviving it at this particular time.

Dr. Frick was born on the 8th of August, 1823, and dying on the 25th of March, 1860, he was thus within a few months of completing his 37th year; and so from his death to the present time, a period of nearly 37 years, just corresponding with the length of his own life, has passed away.

As for this reason the time for commemorating him is fitting, so also the occasion and mode of the commemoration are appropriate. For he was at once on the practical side of our calling, an able and skilled physician, and on its abstract and theoretical side a student and a scholar; and as such it is meet that his memory should be perpetuated by books and identified with them forever.

Even in his early youth he was ever a student in something more and better than that technical and narrow sense in which the word is applied to those who are yet in their undergraduate

career, but he was a student in that nobler meaning of the term which indicates one who in Milton's splendid phrase is "seeking the bright countenance of truth in the pure air of delightful study." And thus in his maturer years he became a medical scholar and "a ripe and good one," ever engaged in investigating the principles of medicine and in studying the fundamental sciences of anatomy, physiology, pathology and chemistry, upon which as its only sure foundations all truly scientific and rational medicine must rest.

His was no mere "case knowledge" of his profession as our brethren of the Law apply that term to the attainments of those in their own calling who, ignorant of the principles of jurisprudence, seek only for points of likeness between the cases before them and others that have been already ruled upon. His mind was of that order which is satisfied as guides to action only with scientific principles or ascertained facts, a knowledge of which is never gained except by constant and diligent study of the best literature of medicine and the allied sciences. Study was ever his delight, for he knew that sound medical knowledge, like sound knowledge of every other sort, is builded up upon foundations deeply laid and that he who knows not the foundations will have but an imperfect and inefficient acquaintance with the superstructure.

Among the remembrances of conversations with him which come back to me after the lapse of many years is one in which he referred to a member of our profession as having neither accurate training of mind nor knowledge of medical literature. "But he has written a book himself," I remarked, believing, in the callowness of youth, that authorship in medicine of itself implied knowledge—an opinion of which, I need not say, I have long since been disillusioned.—"Yes," replied Dr. Frick, "it is true, he has written one book, and had he carefully read any other books worth reading, he would never have written that one." Very different is the judgment to be formed of the various contributions made by Dr. Frick himself to medical

literature. For all of the writings which he left as the result of his comparatively few years of strenuous and faithful work are characterized by the most accurate and careful observation, by patient and laborious analysis, by independent and original thought and by thorough familiarity with what others had done on the same lines of investigation.

In the earliest period of his medical studies he wrote his inaugural thesis on the subject of puerperal fever and fortifying the position which he took by a report of many cases observed by himself, he strongly maintained the contagious and communicable nature of the disease at a time when its character in this regard was by no means so generally held in the profession as it subsequently came to be.

♦ In 1846, the year following his graduation, he made his first contribution to pathological knowledge after entering the medical profession. This consisted of a report made jointly by Dr. Washington F. Anderson and himself of twelve cases illustrating the pigmentary changes occurring in the liver in remittent fever, corresponding with the observations of Dr. Stewardson, which were published in April, 1841, in the *American Journal of the Medical Sciences*, and which were based upon seven cases. This report was freely quoted in 1847 by Dr. Elisha Bartlett, sometime Professor of the Practice of Medicine in the University of Maryland, in his classical work on the Fevers of the United States.

Dr. Frick, while still an undergraduate pupil, had devoted much attention to the study of animal chemistry and, pursuing the subject further in subsequent years, he reported in 1848 the result of a series of very carefully conducted analyses of the blood in health and in disease, which he had made, tabulating systematically the proportions of the various ingredients entering into its composition and showing the variations occurring in many important diseases, especially in tuberculosis, the essential fevers and rheumatism. This report attracted much attention at the time and as constituting a valuable ad-

dition to the knowledge of the subjects then possessed, it was referred to by various subsequent writers who were making similar investigations. It was based upon the study of one hundred and fifty cases of disease and it was remarked at the time that "Dr. Frick's patient spirit in investigation and his perfect fairness in his deductions were shown in the fact that he rejected no less than seventy of these troublesome analyses, because there was some little point in the diagnosis or in the process which he considered as uncertain." He concluded his paper with the statement that "ultimate chemistry plays a most important part in the production of disease; and in unraveling the tangled web of pathological hematology hereafter, its assistance must principally be relied upon," a remark which, however obvious it may be now when investigations in this same line of research have been carried so far and have accomplished so much, must be read in the light of the fact, that he was himself one of the early seekers of truth along this line, whose labors served to mark and light the way.

The same deep interest in animal chemistry led Dr. Frick to take up the study of urinary pathology with the like painstaking and conscientious care which he had shown in his other researches and which caused him to be spoken of by that distinguished physician and in every way admirable man, Professor John A. Swett of New York, as the best authority upon that subject in the United States.

I may say parenthetically that there has seemed to me to be a kinship in character and spirit, as well as a resemblance in professional career between these two eminent physicians, alike as they were in devotion to the duties of their calling, in their rectitude of purpose, in the clearness and comprehensiveness of their intellects, in the thoroughness of their methods of scientific work, in their faculty of inspiring love in all who knew them, and finally, and mournfully, in the early close by death of their bright and promising careers of usefulness.

The result of Dr. Frick's labors in the field of urinary pathology was the publication in 1850 of his work on Renal Diseases in which it was his object, as stated in his preface, to arrange his investigations in an intelligible form, and to remedy such defects in preceding works on the subject as made it distasteful to beginners. In these respects he succeeded admirably, and while, of course, great advances in our knowledge of the subject have been made in the forty-six years that have passed since the publication of Dr. Frick's work, it is still of high value and is well worthy of perusal as an excellent introduction to the subject of which it treats. From this value as well as from personal considerations, I prize as among the most cherished treasures of my own library a copy of this work with an autograph inscription.

His study of urinary pathology naturally led Dr. Frick to attempt the difficult task of clearing up the somewhat confused ideas existing as to the relation between albuminuria and the various organic changes in the kidney, grouped together as Bright's disease, and in 1855, in papers published in the *Virginia Medical Journal* and in the *American Medical Monthly* of New York, he strongly maintained the opinion then beginning to prevail, as against the teaching of the distinguished Dr. Bright, that the mere presence of albumen does not of itself show organic degenerative disease of the kidneys. This again may seem almost a truism now, but it is to be remembered that the obscurity of the subject was cleared up and what is simple, made so by just such work as Dr. Frick was engaged in, for "all can raise the flower when they have the seed."

The seven and thirty years which have passed since his death have witnessed vast changes and wonderful growth as regards pathological knowledge and therapeutic resources. A few instances among the many that might be mentioned may serve to show in part the difference between that time and the present. The cyclical course of pneumonia was then undetermined; the

so-called sorbefacient power of mercury in effecting the removal of pneumonic exudation was still maintained; the conception of pneumonia as an acute infectious disease of microbic origin had not yet been formed; the vast subjects of microbic pathology was in the distant future; the hydro-therapeutics of typhoid fever was practically unknown; and the strictly medicinal measures of antisepsis had not yet enabled surgery to add thousands and tens of thousands of years to the sum of human existence. And yet all the advances that have been made and the still greater results with which the future is teeming are and will be the direct consequences and logical outcome of such methods of work as Charles Frick and his co-laborers of forty years ago were engaged in.

In 1847, two years after his graduation, Dr. Frick had established in association with Dr. Elisha W. Theobald, Dr. Christopher Johnston and Dr. David Stewart, the Maryland Medical Institute, which was designed to be a preparatory and supplementary school of medicine; and here he improved the opportunities offered him for qualifying himself more fully for the position of a teacher of medicine, for which by natural endowments and acquired knowledge he was already well fitted. And when in 1858 the chair of *Materia Medica* and Therapeutics in the University of Maryland became vacant by the appointment of Professor George W. Miltenberger to that of Obstetrics, Dr. Frick was at once called to the place. His didactic lectures from this chair and his clinical instructions in the wards of the University Hospital, to the great value of which I can testify from personal recollection, bore the unmistakable stamp of original thought and large learning, and justified in the fullest degree the expectations which had been formed of his brilliant success as a teacher of medicine. There was in his lectures no effort at forensic display and no endeavor to dazzle with rhetorical phrases. He seemed always actuated by the wise teaching of D'Alembert that "the first duty of philosophy is to instruct and her best eloquence is precision."

But his career in this new and congenial field of work was destined to be short. The sad story of its arrest has been well told and is well known, so that its mournful details need not be repeated here. Let it suffice to say that in the attempt to give relief to a patient in the lowliest walk of life he contracted malignant diphtheria, of which he died on the 25th of March, 1860. In the memorial minute adopted by the Faculty of the University of Maryland they spoke of "the just pride with which in the midst of their grief they contemplated the heroic professional feeling which led their colleague to prefer duty to safety and to endanger and sacrifice his own life in a generous effort to preserve the life of a suffering fellow creature. Such a death they deemed the fit and crowning end of such a life."

One of his nearest friends has spoken of "his beautiful submission to God's will and of the calm, manly courage worthy of the Christian, with which he met the approach of death, which, though deeply regretted, was not untimely, for he had completed the work his Father had given him to do, and had done it well. He left his mark, his impress upon his generation. Young as he was in years, he was eminent in science, skillful in his art, high in the esteem of all who knew him, and his memory is cherished in the hearts of the many who loved him."

Do we not well then to keep alive that memory, and to re-consecrate it tonight by associating it forever with books—with the literature of that medical science which he so much loved, to which he gave his best thought and his unwearying labor, and of which the sole objects are beneficence and the good of humanity?

I can imagine that his "clear spirit which scorned delight and lived laborious days," looking down from where "beyond these voices there is peace," would rejoice in being thus allied with

The loved volumes where the souls
Of the great dead walk gloriously,
The Edens of the mind, the goals
Of mortal immortality.

The great dead—who still live on in the works which they have left behind them. "The best counsellors" says Lord Bacon, "are the dead, and therefore it is good to be conversant in books." So likewise many of the best and greatest leaders in the conflict in which we as physicians are all constantly engaged are among the dead. The scenes of that conflict may appear to be only in the wards and amphitheatres of hospitals, or in the hushed air of chambers of sickness; but if the veil were withdrawn, these might be seen as portions and parcels of that vast arena upon which is waged with unceasing warfare the tremendous contest between good and evil. In that contest I have known no wiser or purer counsellor, no braver or more devoted leader in the cause of truth and right than was he whom we tonight commemorate.

CHARLES FRICK, M. D.

Though time oft mantle of oblivion throws
O'er lives that in brightest luster seemed to close,
It has not yet effaced the memories thick,
That cling about the honored name of Frick.
Him nature formed in gentlest, manliest mould,
Unselfish, patient, modest, yet large-souled,
And amply gifted with those powers rare
That mark the man of genius everywhere.
Him nature taught her secrets to explore,
To penetrate disease's inmost core,
And in the crimson current's heated tide
To trace the paths where fevers lurk and hide.
To carve a way with methods new, to thrust
From musty shelves the antiquated dust;
To grasp the essence of a thing forsooth,
And let in grateful light upon the truth.
Such was the man—his work; faithful in all
And brave—till came the fatal duty's call
And—ere the morn of life into full day
Had ripened—snatched his noble soul away.
These glorious lives—they are *our* heritage:
Hero, benefactor, martyr, sage!
May these be always found disposed and quick
To follow lead of lives of men like Frick.

—E. F. C.

UNSUSPECTED PERILS.

WHEN a short time back it was announced that societies were being established in various parts of the United States for the abolition of promiscuous kissing the news was received with incredulity and amusement. It appears, however, that not only are such societies in earnest, but that they have good reasons for inaugurating a crusade against indiscriminate osculation. A perusal of some recent numbers of American medical journals, says the *Lancet*, would tend to convince the reader that there are very real perils incurred in the practice to which objection is now made. Enthetic diseases leading to the gravest constitutional impairment have been contracted by innocent persons of both sexes.

We fear that there must be a large amount of unsuspected syphilitic disease in the States and are not surprised that notes of warning are being sounded by members of the medical profession. Various instances of the mode of infection are given by our contemporaries—*e. g.*, through the medium of the communion cup, of pipes and cigars, of sur-

gical instruments, of barbers' appliances, of pens and lead pencils, and of paper money, which is occasionally put in the mouth. Labial primary sores would appear to be quite common. A well-known New York physician affirms that a large number of his professional brethren have lately been attacked with digital primary sores, and that what he terms "professional syphilis" is much more prevalent than is generally supposed. As far as we can judge there is no exaggeration in this description of a regrettable state of affairs. It may be within the recollection of some of our readers that twenty years ago at Brives, in France, thirty-one cases of syphilis with four deaths were traced to a midwife who had a chancre on her finger. The writer we have quoted strongly urges professional men to discontinue work when suffering from suspicious sores on the hand, and insists on frequent and abundant use of soap and hot water as being more protective than aseptic solutions of mercury or carbolic acid, and recommends that in place of public worship each person should have his or her own communion cup.

Society Reports.

MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

SEMI-ANNUAL MEETING HELD AT HAGERSTOWN, MD.,
TUESDAY AND WEDNESDAY, NOVEMBER
10 AND 11, 1896.

SECOND DAY.

WEDNESDAY, NOVEMBER 11.

Dr. George H. Rohé introduced the following resolution, which was seconded by *Dr. E. N. Brush* and adopted by the vote of the Society :

RESOLVED, That a committee of one from each senatorial district of the State, with the President of the Faculty as Chairman, be appointed to act in conjunction with the Committee of the Baltimore Neurological Society charged with the duty of suggesting certain amendments to the laws governing commitments of the insane to hospitals and asylums, and other matters connected with the relations of the State to the insane.

In seconding the resolution *Dr. Brush* said : "It gives me great pleasure to second that motion. I was a member of the Neurological Society of Baltimore, and had something to do with this subject when presented to the Legislature. I am not sure that we all appreciate the importance of this measure as thoroughly as we should. Under the laws at present on the books the insane can be committed to asylums in two ways ; first, upon the certificates of two physicians setting forth their reasons for the commitment ; and, second, by act of a jury convened as is the ordinary sheriff's jury. In this event, the patient must be declared both insane and a pauper. Now, you all know there are a number of persons all over the State entitled to admission and proper treatment, but who are not paupers. They are in fact more entitled to treatment than those who have always been paupers, probably as a result of their own bad habits. Another cause for complaint, too, is that lack of power to care for the insane has compelled a number of them to be sent to the almshouse, where they

received only such care and nursing as is accorded to the paupers. The possibility of recovery in these cases is a little less than nothing. It is not only inhuman, but, from a standpoint of public and political economy, a bad method. The average life of the insane, after insanity commences, has been in the last 30 years raised from 9 years to nearly 13. The average duration of patients who recovered under proper care is about 5 to 7 months. Is it better to spend a good round sum and take care of a man for 5 months, or to spend small allowances for 13 years for the kind of care and treatment that you would not give an ordinarily good horse. The object of this committee is to introduce a law that will protect the insane and the sane alike ; to see that the former are properly admitted to asylums and that the proper care and treatment shall be accorded them. Counties and county institutions should not have to care for the insane. They cannot do it. The State is the proper one to do so. Such institutions should be under State control, and it might be wise to have a board of inspection to act as a medium of communication between the insane on the one hand, and the public on the other. The States of New York, Michigan and others are giving their insane such care. New York appropriated last year \$3,000,000 to care for the insane within her borders. Maryland is said to be a poor State, but we are humanitarians, and she is not so poor that she cannot and will not take care of her insane.

Dr. Rohé : I would suggest that the committee will require some time to make up its report for the Faculty, and, as it is probable they will not get together much before the next meeting, I would not state a specified time for their report. This resolution is introduced now in order that the committee may make the proper preparations before the next meeting of the General Assembly, which occurs in January, 1898.

Dr. E. N. Brush then offered the following resolution of thanks, which was seconded by *Dr. C. Birnie*, and adopted by vote of the Society :

RESOLVED, That the thanks of the Medical and Chirurgical Faculty of Maryland, in semi-annual session assembled, are hereby most heartily tendered to the Washington County Medical Society and the members of the profession of Hagerstown and vicinity for the cordial welcome extended and the bountiful entertainment provided for the Faculty; to the very efficient cordial committee of arrangements for the many and unusual courtesies extended to the visiting members; to the Board of County Commissioners of Washington County, and the Honorable Edward Stake, Judge of the Circuit Court, for the use of the Court House as a place of meeting; to the editors of the *Hagerstown Mail*, *Evening Globe* and *Morning Herald* for the comprehensive reports of the proceedings; to the Board of Governors of the Conococheague Club, the Western Maryland Railroad Company, the proprietors of the Hotel Hamilton and the Baldwin House, to the citizens of Hagerstown in general for the numerous acts of kindly hospitality and courtesy extended to the members of the Faculty.

Business having been concluded the Faculty then adjourned.

FRICK LIBRARY OF THE MEDICAL AND CHIRURGICAL FACULTY.

MEETING FOR THE FORMAL DEDICATION OF THE FRICK LIBRARY, HELD AT THE HALL, THURSDAY, DECEMBER 10, 1896, AT 8 P. M.

THE members of the Medical and Chirurgical Faculty were called together to formally receive from the liberal donors, the Messrs. Frick and Mr. Reverdy Johnson of Baltimore, the Frick Library. Dr. William Osler, the president in the chair, made the following

STATEMENT OF THE CONDITION OF THE LIBRARY OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, AND OF THE SECTION OF IT TO BE KNOWN AS THE FRICK LIBRARY.

According to the last report, the Library of the Medical and Chirurgical Faculty had about 8000 volumes on its

shelves. A large proportion of these are important periodicals, the sets of which have been faithfully kept up for many years by successive Library Boards. The income of the Faculty has only permitted an expenditure of a sum just sufficient for this purpose. Complete files of the more important English, French and German journals are now available for reference. The removal to our new quarters was thought to be a very fitting time to strengthen the hands of the Library Board by a combined effort among the members of the Faculty. Accordingly a new Book and Journal Club was organized, the object of which was to add to our journal list, and to buy the important new works as they appear.

The report of the work of the Club for 1896 will shortly be in your hands. I may say that the subscriptions of 120 members enables us to subscribe to a large number of journals, and to buy many new books. There are now on the shelves in the Frick Room periodicals sufficient for the working student in general medicine and surgery. We hope in 1897 to do still more, and early in the year the officers of the Club will make a systematic endeavor to obtain 200 members.

In apt illustration of the adage "The Lord helps those who help themselves," came the bequest of the Messrs. Frick in memory of their brother, Dr. Charles Frick. This has given us a beautiful reading-room, and has placed between 400 and 500 new books on our shelves. The present idea is to make the Frick Library the Medical Section of the General Library, and to place in it the works relating to medicine proper, in contradistinction to surgery and other branches. Through the liberality of Mr. W. F. Frick and Mr. Reverdy Johnson we shall be enabled annually to furnish new books as they appear. Dr. Frick's work was so largely in urinary and renal diseases that we propose to furnish the Library very completely in monographs upon this specialty.

It has been said that a man's books are a good index of his character; so,

too, the general medical library is in a measure the best index of the condition of the profession in a city. To be on a par with the large European and with the chief cities of this country, Baltimore needs a medical library at least four times the size of the present one. This in time we can have. Let me indicate the three ways in which individual members may help. First, by joining the Book and Journal Club, which enables us to add many new books and additional journals. Second, by bringing in new members, of whom we have only 500; there should be at least 1000. And thirdly, we can all remember the Library when we have ourselves been remembered in a fatter fee than usual, or in an unexpected wind-fall. To the more prosperous members of our Faculty I would say, "freely ye have received, freely give." We want large individual sums; we also desire small amounts from large numbers.

In two years this Ancient and Honorable body will keep its Centennial Festival, at which time we may look forward with confidence not only to cancelling the debt upon our building, but also to the acquisition of a considerable capital fund, the interest of which may be applicable to a still further extension of our Library and accommodations.

Dr. Samuel C. Chew then delivered the COMMEMORATIVE ADDRESS. (See page 181.)

Mr. Reverdy Johnson, a warm personal friend of the late Dr. Charles Frick and a member of the Baltimore Bar, then paid a tribute of a personal friend in the following address. He, at the same time, presented to the library a copy of Dr. Frick's "Renal Affections" with autograph inscription and also his gift of one hundred dollars a year to the library.

This movement of the medical profession to recognize talent and worth does credit to itself, while recalling the merits of one so soon torn from a career of reputation and usefulness.

Dr. Chew has dwelt fully upon the medical relations of a lamented member; may it be my part, as a close personal friend, to refer to the man as illustrated

by his many attractive traits of character.

Dr. Frick was one who attached others to him by kindness, sympathy and a willingness to help. What better combination could be formed for the complex moulding of the physician, the useful citizen, and the faithful friend? To all who in those younger days consorted with him in social pastime and recreation hours, there were none who did not regard him in that light and always hail his sunny, cheerful presence. The elders of your profession, here this evening, know full well how these personal attractions, apart from professional ability, endeared him to those who sat under him in the lecture hall and how sincerely they mourned his sudden and untimely death.

Many were the eyes dimmed by tears as the sad news broke upon them, and I am sure the juniors of that day who, here or elsewhere, have advanced to the first rank in the profession, will respond in all sincerity to the touching tribute to the memory which you now inaugurate.

In application to his pursuit, Dr. Frick was untiring and persistent.

Often have I been with him in his office hours, when, without apparently relaxing thought or attention to his instrument, he would assume the double part of companion and steady investigator; never forgetting his aim of research, and the laudable ambition of advancing his profession and the welfare of his fellow man.

Those of you who know the special line to which he devoted himself can better appreciate its medical trend than the mere layman; and some of you, with your more advanced knowledge, and the modern appliances of theory and practice, may have seen realized the ends at which he aimed.

He who is successful in early research is as much entitled to merit as those who work out the problem to solution; might we not, therefore, say that the name you have applied to your association may claim some portion of the blessings of suffering ones on the medical men of this modern era?

Of all the personal companions of the days to which I refer but very few survive, and those are here to do tribute to a memory which is as warm with them as with his professional brethren who are moved to this graceful memorial.

May the association flourish, and may all its younger members be encouraged and aided by the name it bears.

Dr. J. M. Da Costa, President of the College of Physicians of Philadelphia, then congratulated the Faculty on this addition and gave a brief review of the condition of libraries in various parts of the world.

Dr. Joseph D. Bryant, President of the Academy of Medicine of New York, also made some remarks on the value of libraries to the profession as follows :

I desire at the outset to express the great pleasure which I feel tonight because of the opportunity to be present and unite with you in the rejoicing that attends the triumph of so important an event as this. While it is not likely that I can add to the measure of your joy, still, it is probable and, I think, fair, that I should absorb as much as is possible of the spirit of the occasion, and return with it to my colleagues in New York.

We of the New York Academy of Medicine are now engaged in the establishment of a fund of \$100,000, the income of which is to be devoted only to the purchase of books for the library of the organization. At the present time the fund exceeds \$50,000, \$30,000 of which was secured within the last year. The library now numbers over 55,000 volumes and is increasing at the rate of 2500 per annum along the older methods of procedure.

The importance of events of the present nature can be fairly appreciated only by those who know the value of books or are engaged in the consummation of achievements of a similar character. Much that is very good, indeed, has been said by writers of many periods in commendation of books; and, as an author properly said, "One cannot celebrate books sufficiently. After saying his best, still something better remains to be spoken in their praise." (Alcott).

And while it may not seem strange that writers of good books should often regard the products of their labor with less favor than that indicated in the preceding expression, yet it is striking that they, with all thoughtful people, regard a good book as the only true and unwavering friend that man possesses. The kind of books which one covets, quotes and communes with during the leisure moments is a surer indication of his character than are the opinions of the local clergy. The former are unimpressible, silent witnesses of good and bad alike and testify with a certainty that admits of no dispute.

"Oh, that mine adversary had written a book," was uttered by patient Job—for reasons of his own—more than 3000 years ago and has been repeated often since by those familiar with the fallibility of human judgment and the steadfastness of printer's ink, for similar reasons.

All books are not good books, even though they be "doctor" books. But all books are a fair index of the time of their birth, no matter what they be.

Medical books, like other books, are the repositories of the mental conceptions and experience of those who have gone before and those following after. They contain the aggregated wisdom of past observation, enabling those of the present to build on a higher and securer foundation. And you, my friends, and every one, find the sufferings in the world lessened and happiness augmented; the lives lengthened and human usefulness extended, because of the presence and the purpose of medical books.

The medical press is the day-book and the medical tome the ledger of the medical events of the time. The record of the past is the compass of the future, which points the way to success as unerringly as does the magnet to the home of perpetual snows.

Records of the past, did I say? "There is no past so long as books shall live," said Bulwer-Lytton. Rather let us say that in the presence of books the past with its lessons is ever before us.

A library is a collection of books and the influence which it exercises is in di-

rect proportion to the number and standard of its factors. In order that a library shall be thoroughly effective, the component parts should be selected and maintained with consummate care and by wise authority. The crippled responses of an incomplete medical library are like the halting gait of one with a leg shorter than the other. A worthless book in a practical library is out of place as much as a grog-shop in a respectable community. And as one micro-organism may defile the mass, so one pestilential book may for a time paralyze the usefulness of the entire collection.

The plenitude in number and quality of the books of a private or public medical library is quite as certain a token of the status of the possessor as is the thermometer of the weather, provided always that the effects of attrition on the books and the minds show that, as the pages become duller and thumb-worn, the minds become brighter, though care-worn. Dawson said, on an occasion somewhat similar to this, "Remember, we know well only the great nations whose books we possess; of other nations we know nothing or but little."

The students of antiquity burrow among the ruins of ancient cities, in search of a trace of character outline that may link the past with the present, as famishing moles burrow for a bit of food. The evidences of this nature which may be found where Baltimore now stands, thousands of years along, by students of that period, will indicate to them Baltimore's station in the affairs of men during the period of her existence. Therefore, you build not only for the present but for the future; not only for the enlightenment of the profession of today, but for the instruction of those who may interrogate the silence of the days to come.

How fitting, then, it is that vanished minds be commemorated by the indelible thoughts of the period in which they lived. No monument of stone nor steel can speak with its one tongue as can a library with its tens of thousands. The one points upward only, and in silence tells its simple tale; the other points everywhere, expressing not only the

purpose of its presence, but declaring in loud tones in many tongues the truths of the age of its respective units.

It has seemed to me often that the gladness of benevolence reaches its highest point when it shall have been prompted by the giving of a library of useful books to a needful cause. Indeed, those citizens who heed the bidding of this desire contribute more to the moral excellence of a community than do those who found cities and establish avenues of commerce. I wish to say to those who have met so generously the requirements of this occasion, that the fruits of the act will ever increase in their abundance and richness; and, to those who may be likewise inclined, I will add, they who give books bestow knowledge; they who bestow knowledge, give power, for "Knowledge is power," said Bacon.

In the instance of good medical books is given the power to remedy the afflictions of life, thus increasing life's happiness; in the instance of all good books, the power that brings man still nearer to Him in whose image and after whose likeness he was created.

RESOLUTIONS.

THOMAS CARNES PRICE, M. D.

At a meeting of the Georges Creek Medical Association, held at Frostburg, Maryland, on the eighteenth day of November, 1896, the following was unanimously adopted:

WHEREAS, It has pleased God in the exercise of His Divine will to remove from the sphere of his usefulness our esteemed friend and co-worker, THOMAS CARNES PRICE, M. D.; and

WHEREAS, It is most right that we take to ourselves that consolation afforded by the rehearsal of a virtuous life;

THEREFORE, Be it

Resolved, That, as an association of physicians who knew him personally and lovingly, we add our own to the many other expressions of his manly character and professional worth.

Resolved, That we recognize in him a

physician modest and just, despising not the humblest who sought the benefit of his ripe knowledge; suave, courteous and gentle, noted for his urbane manner; who knew no professional trickery or device, deserving and enjoying the respect of his colleagues and the gratitude of his patients, he will ever live in their memories, abounding in charity for his brethren and ever zealous for the welfare and dignity of his calling. A consultant who judged conscientiously, more careful of the rights of others than of his own, with a liberality that was admirable, seeking not renown but exactness—a man in all the walks of life blameless.

Resolved, That Dr. Price possessed the true elements of manhood; he was true, genuine, sincere and real. Probity, uprightness and unselfishness were typified in him, while his character was imbued with and moved by a deep religious conviction. He was filled with the warmest and tenderest sympathies for his suffering fellow-man.

There is no death; an angel form walks o'er the earth with silent tread;
He bears our best loved things away, and then we call them dead.

Resolved, That these resolutions be recorded among the minutes of this Association, and a copy of the same sent to the MARYLAND MEDICAL JOURNAL for publication; and that we tender his bereaved family our sincere sympathy, knowing that to them his life was a pæan of affection and one long benediction.

C. C. JACOBS, M. D.,
President,
B. M. CROMWELL, M. D.,
C. BROETMARKEL, M. D.,
J. O. BULLOCK, M. D.,
Committee.

W. OLIVER McLANE, M. D.,
Secretary.

Medical Progress.

ACTION OF BOARDS OF HEALTH.—Some startling rumors have reached the *American Medico-Surgical Bulletin* of proposed legislation by boards of health.

Out in Indiana an official of the Board of Health, of misogynistic tendencies, has discovered that the practice of osculation is attended with the danger of communicating disease. He is endeavoring to persuade his colleagues to issue an edict forbidding the practice, or, should this not seem feasible, to require maid and youth, widow and bachelor, to rinse their mouth with some disinfectant solution before resorting to the time-honored and most seductive practice. From a strictly sanitary standpoint the *Bulletin* trusts the efforts of this advanced board of health officer may prove successful, although skepticism is uppermost when we remember that, since the day when "the breath blew o'er Eden," it has become a second nature with mankind to osculate at every opportunity. So strong is the force of habit, and so impulsive is the act, that we question if many, aside from crusty old bachelors, could be compelled to rinse their mouths with antiseptics before lip met lip in quick response to instinct's mandate.

Another board of health, and nearer home, is seriously considering the advisability of forbidding the appearance of dogs on the streets on the ground that the excrement is dangerous to health. Why stop short at dogs, gentlemen? Horses and cats drop excrement of a far more offensive type! The *Bulletin* praises your ardor, but really are there not more palpable dangers to health, to which you seem blind? Stop the street noises; force wealthy and powerful corporations to cease deluging the streets and the interior of houses with cinders; continue the good work of tearing down rookeries. These and other nuisances to health having been abated, it will be time to wage war on man's best friend, the dog, and if do so you must, pray devise an antiseptic stopper to be inserted into an essential sphincter of the dog in order that man may not be deprived of

SURGEONS WANTED.—One of the effects of the Cuban struggle is a demand for surgeons, and an exchange says that General Weyler could use one hundred surgeons now and has extended the age limit to attract surgeons to the service.

one of the chief pleasures in life—that of the companionship of the dog.

Indeed, gentlemen of boards of health, are not your duties onerous enough that you must seek to play with "trifles light as air"?

* * *

THE AFTERNOON NAP.—The frequency with which medical men are asked whether it is harmful to indulge in the "afternoon nap" is not, perhaps, surprising for several reasons. Most persons have had experience of the seductive charms of the somnolence which has followed the comfortable ingestion of a midday or evening meal. The meal finished, the diner arranges himself comfortably in an armchair; it may be he lights a pipe or cigar, takes up a newspaper, and prepares to make the most of the restful condition of his mind and body. But nature soon begins to assert her sway. In time, the eyelids close, the head begins to nod, the newspaper falls from the hands, the pipe, no longer supported in the mouth, falls to the floor, and the symptoms of a nap are complete. Whether the "winks" be forty or one hundred in number, the result is the same—a short, sound sleep. Then comes the question—Is it harmful thus to fall asleep after a meal? *Medical Progress* thinks not; for the very obvious reason that the process is merely a physiological one, and as such, when it occurs, is quite natural. When digestion is in progress, nature has arranged that all the available blood in the body shall be collected in and about the digestive organs. Consequently the blood supply to the brain falls to a low ebb, and thus sleep is easily induced. On the other hand, of course, physiologically, it is wrong for brain work to be attempted immediately after a solid meal.

* * *

UNDERPAID PHYSICIANS.—The following from a sermon delivered by the Bishop of Norwich, England, will be read, we doubt not, with interest by many American physicians and laymen. As quoted in the *Medical Herald*, he said:

"Nor can I, [nor shall I, be silent

about the wrongs to which scores of medical men are subject. I refer to the startling contrast there is between the inexorable demands which society makes on medical men, and the elasticity of the social conscience with respect to his remuneration. I have known cases where they are summoned, at all hours and all seasons of the year. Their bills are presented with timidity, if not anxiety, and they are sometimes received with amazement, sometimes with indignation, and sometimes relegated to oblivion. Nor are cases unknown where the righteous demand for work done is met by calling in another practitioner; he, in turn, to suffer as his brother did before him. I cannot permit myself to imagine that I address any such wrongdoer here today. But if I do, then, in my Master's name, I entreat you to remember that the medical men of this nation are the highest type of their class in the world; they are entrusted with the secrets of domestic life; they have all our liabilities of their order; they frequently die as martyrs to science, to suffering, to sympathy, to destitution. Believing this, my plea is that every unpaid medical bill be discharged generously, gratefully, cheerfully, and that whatever account must be deferred in payment the last to be deferred is the account of him who is the human agent who has brought us into the world, enables us to continue our work in life, and many a time lays down his own in endeavoring to baffle death."

* * *

THE TREATMENT OF HEMORRHOIDS BY WHITEHEAD'S METHOD.—Delorme (*British Medical Journal*), at the Tenth Congress of the French Surgical Association, spoke very favorably of Whitehead's treatment of hemorrhoids, which he regards as the method of election in cases of large internal or extero-internal piles forming a prominent circular mass. In eighteen cases thus treated by the author the results were very satisfactory as the operation was followed by primary union, exact apposition of the skin and mucous membrane, the formation of a supple and dilatable cicatrix, and freedom from both retention and inconti-

nence. The cure is a radical one provided the gut be incised above the zone of venous dilatation. The immediate hemorrhage, though sometimes embarrassing, is rarely profuse. The following are regarded as indispensable conditions of the success of Whitehead's operation: The incision to be made above the limits of the affected mucous membrane; the selection of a strong suture; careful preservation of the sphincters, especially the external; the maintenance of absolute rest of the perirectal muscles until the complete development of firm union.

* * *

USEFUL MEDICATION IN TYPHOID FEVER.—A very intelligent aspect of the drug treatment of typhoid fever is given by Dr. Henry R. Slack of La Grange, Georgia, in the *Atlanta Medical and Surgical Journal*. He remembered the experience of his old preceptor, Dr. H. V. M. Miller, who noticed that cases seen at rare intervals in a scattered country practice seemed to do better than those who received many visits in the city. Some cases will recover and some die in spite of all treatment.

Dr. Slack, who is also a graduate pharmacist, noting the alleged success of Dr. Woodbridge, worked at many new drug combinations and among them he suggested the following combination in typhoid fever when the temperature is high and the heart complications render the use of the usual antipyretics dangerous:

- R.—Ammonii carbonatis, 8 gm. ($\bar{3}$ ii.)
 Acidi salicylici, 10 gm. ($\bar{3}$ iiss.)
 Elix. pepsini lactat.,
 Aquae cinnamomi, āā, 60 cc. ($\bar{3}$ ii.)
 M. Sig.—Teaspoonful in a little water
 every three hours.

He does not claim to abort typhoid fever with this prescription, but he finds it does relieve many distressing symptoms. In prescribing this treatment the pharmacist should be cautioned to use only the translucent lump of ammonium carbonate, which should be dissolved in cinnamon water, then adding the salicylic acid and lastly the elixir of lactated pepsin.

RESULTS OF PARTIAL SECTION OF THE GLOSSO-PHARYNGEAL NERVE.—An abstract of an article by S. Meyer is published in the *Lancet* giving the results of some experiments he has made upon the glosso-pharyngeal nerve. He effected partial division of this nerve in young rabbits, and thirty hours after the operation observed a commencing conversion of the neuro-epithelial cells of the taste-buds into laminated epithelium. The process of change first made its appearance in the lowermost buds, then affected the uppermost, and finally exhibited itself in the middle buds of each row. There did not appear to be any cell destruction, but simply an alteration in the characters of the cells now no longer under the influence of the nerve. After about twelve days the last remains of the gustatory bulbs disappeared and the grooves of the circumvallate papillae began to be filled up with laminated flattened epithelial cells. The epithelium at the bottom of the furrows presented numerous leucocytes distributed amongst the cells, which in part escaped through the original openings of the cells. The only change in the peripheral portion of the divided nerve was simple degeneration.

* * *

TUBERCULOSIS IN INFANCY.—Tuberculosis was formerly considered a rare disease in infancy, but recent investigations have shown the disease is more common at that early period than was formerly supposed. Dr. L. Emmett Holt published some statistics in the *Medical News* from which he concludes that: Intra-uterine infection in cases of tuberculosis is very rare, the child often escaping even when the mother is suffering from active disease in an advanced form.

2. Infection through the alimentary tract is also very rare, and will not explain more than one or two per cent. of the cases.

3. The distribution of the lesions in tuberculosis of infancy and early childhood points conclusively to infection in the vast majority of cases through the respiratory tract.

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CORRESPONDENCE upon subjects of general or special interest, prompt intelligence of local matters of interest to the profession, items of news, etc., are respectfully solicited. Marked copies of other publications sent us should bear the notice "marked copy" on wrapper.

MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, DECEMBER 26, 1896.

A YEAR ago the MARYLAND MEDICAL JOURNAL made the following announcement:

With the desire to improve *The Journal for 1897*, the literary character of the MARYLAND MEDICAL JOURNAL, the management has arranged with a number of specialists of prominence to act as collaborators throughout the year 1896. Each collaborator will have charge of one department and will give a careful, critical review of books, a report on the progress of medicine and contribute editorials in his special department. It is hoped in this way to materially strengthen the standing of the JOURNAL and to give the readers as good matter as possible from the material within the State of Maryland and the District of Columbia.

A journal is not always what the editors make it, but depends on the literary center in which it lives. The endeavor will be to give work principally of a practical nature, but the results of scientific and laboratory work will not be passed over. If it is found that the proposed division of labor and infusion of new literary blood meets with the approval and support of the readers, the JOURNAL will then be ready to make other advances.

With this idea arrangements were made with specialists to collaborate with the editor and the following staff was organized and began work January 1, 1896:

Surgery, Dr. RANDOLPH WINSLOW; *Gynecology*, Dr. Thomas A. Ashby; *Obstetrics*, Dr. John Whitridge Williams; *Eye and Ear*, Dr. Hiram Woods; *Skin*, Dr. T. C. Gilchrist; *Materia Medica and Gastro-Intestinal Diseases*, Dr. Charles E. Simon; *Psychiatry*, Dr. Irving C. Rosse; *Nervous Diseases*, Dr. George J. Preston; and *Children*, Dr. A. K. Bond. The department of general medicine was given to the editor. These gentlemen have all faithfully done their work throughout the past year and if any improvement has been noticed in the JOURNAL it is undoubtedly due to the coöperation of such an able corps of physicians.

It has been noticed that some cavillers still maintain that the MARYLAND MEDICAL JOURNAL is not up to the proper standard, but inquiry usually brings out the fact that such fault-finders are men who never take the JOURNAL, never read it and have never in any way contributed toward its support. These are such as live in a chronic state of grumbling and croaking and, like bilious people everywhere, never see any good in productions of their own neighborhood.

Medical journals, like medical societies, are needed in every community, not only as a means of communication between physicians, but as moulding and reflecting medical opinion. Still further, medical journals diffuse medical knowledge and raise the standard by compelling a more careful and considerate expression of opinion. When a man knows that his words are to be printed and read he is much more careful of what he says and how he says it.

Medical journals also serve the further purpose of spreading abroad knowledge of the wares which are advertised in these journals. Advertisers are too often ignored by the unthinking physician, while everyone should know that it is through the advertiser alone that the publication of a medical journal is made possible. The physician who fails to read the advertising pages of his journal is far behind the times and needs instruction.

The following additions have been made to the staff of collaborators for 1897: Dr. Henry Dwight Chapin of New York, in *Diseases of Children*; Dr. Robert Tunstall Taylor, in *Orthopedic Surgery*; Dr. Thomas H. Buckler, Jr., in *Gynecology*, and Dr. Edward M. Schaeffer, in *Physical Culture, Hygiene and*

Sanitary Science. The collaborating staff will then be as follows :

Surgery: RANDOLPH WINSLOW, M.D., Professor of Anatomy and Clinical Surgery, University of Maryland.

Orthopedic Surgery: ROBERT TUNSTALL TAYLOR, M.D., Surgeon in Charge of the Hospital for the Relief of Crippled and Deformed Children; Clinical Professor of Orthopedic Surgery, Woman's Medical College; Demonstrator in Orthopedic Surgery, Baltimore Medical College.

Gynecology: THOMAS A. ASHBY, M.D., Professor of Diseases of Women and Children, Baltimore Medical College; Professor of Obstetrics, Woman's Medical College; and THOMAS H. BUCKLER, Jr., M.D.

Obstetrics: JOHN WHITRIDGE WILLIAMS, M.D., Associate Professor of Obstetrics, Johns Hopkins University.

Ophthalmology and Otology: HIRAM WOODS, Jr., M.D., Clinical Professor of Eye and Ear Diseases, University of Maryland, and Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital.

Dermatology: T. C. GILCHRIST, M. R. C. S. (Eng.), L. S. A. (Lond., Eng.), Associate in Dermatology, Johns Hopkins University; Clinical Professor of Dermatology at the Baltimore Medical College and the Woman's Medical College.

Materia Medica and Gastro-Intestinal Diseases: CHARLES E. SIMON, M.D., Late Resident Physician, Johns Hopkins Hospital, author of "Clinical Diagnosis."

Psychiatry: IRVING C. ROSSE, M.D., Lately Professor of Diseases of the Nervous System, Georgetown University; Member du Congrès International d'Anthropologie Criminelle; of the American Neurological Association; the New York Medico-Legal Society; Vice-President of the Medico-Legal Congress, etc.

Nervous Diseases: GEORGE J. PRESTON, M.D., Professor of Physiology and Clinical Professor of Nervous Diseases, College of Physicians and Surgeons.

Children: A. K. BOND, M.D., Clinical Professor of Diseases of Children, Baltimore Medical College; and HENRY DWIGHT CHAPIN, M.D., Professor of Diseases of Children, Post-Graduate Medical School of New York, Physician to the Demilt Dispensary, Attending Physician to the Babies' Ward, Post-Graduate Hospital.

Physical Culture, Hygiene and Sanitary Science: EDWARD MORTON SCHAEFFER, M.D., Member of the American Association for the Advancement of Physical Education, Editor of the "Health Magazine."

General Medicine: WILLIAM B. CANFIELD, M.D., Lecturer on Clinical Medicine, University of Maryland, Visiting Physician to the Union Protestant Infirmary and Hospital for Consumptives.

* * *

THE absence of any uniformly recognized authority on orthography in the United States has caused a wide diversity in the spelling of certain words and the almost too ready coinage of new words without sufficient sanction as to form and construction.

It is very satisfactory, therefore, to note in the last number of the *Bulletin of the Johns Hopkins Hospital* that Dr. Lewellys F. Barker in using certain neurological terms made necessary by the ever rapid advancement of that branch of medicine, looks the subject up carefully and uses the word "neurone" only after obtaining the authority of such a classical scholar as Professor Gildersleeve.

If some body of learned men like the French Academy could act as god-father to all new terms and words, settling once for all the correct spelling and definition, then the multiplication of dictionaries with the varied orthography would be avoided. The best medical dictionary in English is marred by spelling which robs so many words of their philological originality. The history of a nation may be traced through its language and while changes in the forms of words must of necessity take place, such changes are usually gradual. The British nation is very conservative in most matters and especially in that of spelling.

Some publishing houses, notably the Appletons, adhere closely to British orthography and it must be confessed that the orthography of the *Journal of Experimental Medicine* is much preferable to that employed in some of the weekly medical journals. Even the final "our" in such words as "colour" is refreshing after reading in one of the newer journals of a "clinic lecture."

Would-be philologists should remember that the language of a nation is sacred and, except perhaps in dialect stories, should be respected.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending December 19, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		20
Phthisis Pulmonalis.....		19
Measles.....	4	
Whooping Cough.....	4	1
Pseudo-membranous Croup and Diphtheria. }	33	8
Mumps.....		
Scarlet fever.....	38	
Varioloid.....		
Varicella.....	2	
Typhoid fever.....	3	4

Germany expects to add a sixth year to its medical curriculum.

South Carolina colored physicians have formed a State Society.

The Detroit College of Medicine was destroyed last week by a disastrous fire.

Cambridge, Mass., has an institution called the Holy Ghost Hospital for Incurables.

The New York Academy of Medicine will celebrate its semi-centennial on January 29.

Dr. C. Hampson Jones was recently appointed sanitary inspector in the health department.

Dr. George M. Gould of Philadelphia has issued a book of poems entitled: "An Autumn Singer."

The Western Ophthalmological, Otological, Laryngological and Rhinological Association will meet in St. Louis, April 8 and 9, 1897.

Another midwife was convicted last week of failing to notify a physician or the health office in a case of ophthalmia neonatorum.

The *American Medico-Surgical Bulletin* will hereafter be issued as a semi-monthly, with Dr. R. G. Eccles of Brooklyn as editor.

Dr. W. M. L. Coplin of Philadelphia has been appointed bacteriologist to the Pennsylvania State Board of Health, and Dr. Richard Slee of Swiftwater, Dr. Nelson F. Davis of Bucknell University, and Dr. Robert L. Pitfield of Germantown, assistant bacteriologists.

The *New York State Medical Reporter* announces a list of department editors for 1897, showing the progress reached by that journal.

The first medical school in America was established in Mexico; the first printing press on the western continent was set up in the same city.

Dr. George M. Sternberg, Surgeon-General of the United States Army, has received the honorary degree of LL.D. from Brown University.

Nearly fifty per cent. of San Francisco dairy cows will have to be slaughtered to stamp out tuberculosis, which is making great havoc among them.

The value of the municipal bacteriological laboratory was illustrated of late when milk which had passed the ordinary tests by the inspectors and also the test in the chemical laboratory was found by Dr. Stokes to contain streptococci and was consequently confiscated and the dairy farm blacklisted.

The death of Dr. Déclat of Paris is announced. He was the author of several treatises on antiseptic methods of treatment. His most remarkable are on the treatment of infectious diseases by carbolic acid. Dr. Déclat was well known to a large section of the Paris public. After a long medical career he retired to Nice, where he died.

At the meeting of the American Public Health Association the following officers were elected for the ensuing year: President, Dr. H. B. Horlbeck of Charleston, S. C.; First Vice-President, Dr. Peter H. Bryce of Toronto; Second Vice-President, Dr. Ernest Wende of Buffalo; Treasurer, Dr. Henry D. Holton of Brattleboro, Vt.; Secretary, Dr. Irving A. Watson of Concord, N. H. Place of next meeting, Philadelphia, 1897.

The trustees of the Johns Hopkins Hospital have made the following additions to the hospital staff: Dr. George W. Dobbin, resident obstetrician; Dr. W. W. Dabney, assistant resident obstetrician; Dr. S. McP. Glasgow, assistant resident gynecologist; Drs. E. B. Block and T. McRae, assistant resident physicians. Dr. Dobbin has acted for some time as assistant to Dr. Howard A. Kelly. The children's ward, which has been completed, will not be opened until after the holidays.

Book Reviews.

PARK'S TREATISE ON SURGERY. By American Authors. Edited by Roswell Park, M. D., Professor of Surgery and Clinical Surgery, Medical Department, University of Buffalo, Buffalo, N. Y. In two very handsome octavo volumes, comprising 1600 pages, with 786 engravings, largely original, and 37 full-page plates in colors and monochrome. Volume I, General Surgery and Surgical Pathology. Volume II, Special Surgery. Price, per volume, cloth, \$4.50; leather, \$5.50. Net. Lea Brothers & Co., Philadelphia and New York.

The second volume of this treatise treats of Special or Regional Surgery. The subjects covered by this book are numerous. Head troubles are treated by Dr. Park; diseases of the spine by Dr. E. H. Bradford of Boston. The details of the operations on the nerves are very meager. The method described for the removal of the Gasserian ganglion is complicated and difficult to understand and no mention is made of the Hartley operation.

Dr. Duncan Eve gives a series of injuries to the heart. Dr. Eve recommends heart suture in wounds of this organ, as well as heart puncture in conditions of great engorgement. Dr. Dennis of New York, who contributes the chapter on "Surgery of the Chest," recommends pneumotomy for the evacuation of abscess of the lungs and has collected fifteen cases of complete recovery after this procedure. The following statement is made by the authors of the chapter on "Injuries and Wounds of the Abdomen," Drs. M. H. Richardson and Farrar Cobb of Boston: "In gunshot wounds involving the abdominal cavity, exploration by laparotomy is always indicated in the first hours; after an interval of six hours or more without symptoms of either hemorrhage or peritonitis, the treatment may be expectant." We cannot thoroughly commend this statement; in our opinion all penetrating gunshot wounds should be treated by exploratory incision if seen within twenty-four hours from the time of injury. The same authors, in speaking of the indications for operation in appendicitis, say "a high temperature alone is of slight significance as an indication for operation; a high pulse alone is a much more reliable guide." This is an important axiom. Park's System is a most valuable addition to our list of text-books.

Current Editorial Comment.

PHYSICIAN'S WORK.

Medical Examiner.

THE sage advice has been given that physicians should work less. That's all right, but physicians are not throwing away any practice. If his income and work were assured factors, the doctor could regulate the amount of work to be performed and his probable compensation. This is impossible. His practice usually comes by spurts. There is a busy season and a quiet season, and he must earn money while he has the opportunity. The advice is good, but impracticable.

PAUPERIZING THE PROFESSION.

Tri-State Medical Journal.

NOT content with fostering many cheap insurance schemes and aid societies, whose members receive gratuitous medical and surgical treatment for the payment of a ridiculous fee, Saint Louis now boasts of at least one hospital where free treatment is given to all who join an association, whose members pay the magnificent sum of fifty cents a month! With the City Hospital, Female Hospital and Poor House, in addition to the countless free clinics and dispensaries at the command of all who cannot or wish not to pay a fee, the outlook for the future finances of the general practitioner is exceedingly bad. Before the profession is pauperized we hope the general government will pension all physicians and surgeons.

PHYSICIANS' RIGHTS.

Medical Record.

FAITH, hope and charity healers, mind, brain and thought curers, hypnotic, hydro-pathic, magnetic, eclectic, spiritualistic, human and divine workers of miraculous cures increase and flourish. The reputable physician walks to his dispensary class and treats many who should be going to his own or to his brother's office, and who will tomorrow run off to "a divine healer" and leave a bank bill on his table in return for the benefit they hope will come from the laying on of hands. There are many things the self-respecting physician cannot fight against, but how some men can put up with the indignities placed upon them by hospital authorities and continue to respect themselves is more than we can explain.

Publishers' Department.

Convention Calendar.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

MANAGEMENT OF INCURABLE CASES OF CANCER.—In an instructive and valuable article on this subject Dr. Daniel Lewis, surgeon to the New York Skin and Cancer Hospital (*Medical News*, November 7, 1896) states that the resources which may be employed to advantage in these hopeless cases vary according to the site of the disease, and, in some degree, to the temperament of the patient. The remedies indicated may be classified as follows: 1. Physiological influences: 2. Medicinal agents: 3. Surgical operation: 4. Local applications, dressings, antiseptics, etc: 5. Anodynes: 6. Inoculation with various toxins. As regards local applications Dr. Lewis remarks that the use of iodoform in private practice has become an inexcusable offence since the introduction of other remedies, and that there is no further necessity for a surgeon to render himself a nuisance to every one he meets by dressing a case with iodoform gauze or powder. If an ointment dressing be indicated he considers Aristol with vaseline of suitable strength (20 grains to 2 drachms to one ounce) as among the best. This or any other ointment will be more grateful to the patient if spread upon a thick layer of absorbent cotton instead of lint or gauze. The cotton is more easily adapted to every inequality of the ulcerated surface and from its lightness and tendency to cling to the surface when moistened, is seldom displaced. In cancer of the uterus the author says a deodorizing lotion is of the first importance and one containing eucalyptus is preferable to a plain antiseptic solution. The vagina may also be loosely packed with cotton tampons, saturated with a solution (five per cent.) of Aristol in aboline or benzoïnol, a dressing which the nurse can readily renew. A vulvar pad of finely prepared oakum is both absorbent, a good deodorant, and cheaper than cotton, and is equally useful in advanced cases of cancer of the rectum.

N. H. PIERCE, M. D., Ann Arbor, Michigan:—In a case of neuralgic cystitis, Peacock's Bromides acted like a charm, and has quieted the nerves in physical exhaustion from overwork in myself as nothing has ever done before, leaving no depression or bad symptoms from reaction. I endorse its use heartily, and shall continue to use and prescribe it in my practice.

MARYLAND MEDICAL JOURNAL

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Original Articles.

TREATMENT OF ACUTE GONORRHEA.

By John D. Blake, M. D.,

Professor of Surgery, Baltimore Medical College.

READ BEFORE THE BALTIMORE MEDICAL ASSOCIATION, OCTOBER 26, 1896.

THE treatment of acute gonorrhea is doubtless a subject which has to a greater or less extent interested you all at some time during your professional life. And while I fully appreciate the fact that my theme is by no means a new one, yet I feel encouraged to know that I cannot be successfully charged with imposing upon you a dry subject. My daily experience leads me to believe that whatever may be the views of a large percentage of our profession as to the etiology and pathology of this very troublesome disease, they entertain a very vague and indefinite notion regarding the proper and successful methods of treatments.

Gonorrhea at best is essentially a troublesome disease — troublesome not alone to the patient, but to the physician as well, on account of the tenacity with which it holds to its victim. Few diseases cause more anxiety than does this disease, anxiety to patient, to friends and to physician alike. I have therefore brought this subject to your attention at this time solely for the purpose of awakening new life and bringing forth new ideas, so that a more tangible and satisfactory understanding of the treatment of acute gonorrhea may be had.

In the language of another, I do not want you to think that I intend to

launch out in a new channel or role regarding the treatment of acute gonorrhea, for I am sure if I did you would say that it was another needless exploring expedition, setting out on the trackless sea of gonorrhea with no definite point in view and with uncertainty regarding the existence of such a haven.

I shall content myself this evening by simply calling your attention to my method of using remedies well known to you in the treatment of this disease, laying stress not so much upon the remedy, as upon the method of its use.

I confess I was not one of those who a few years ago thought that the millennium for gonorrhea had come when the hot antiseptic solution injection method was introduced, nor am I one of those who believe that nothing can be gained by such treatment. I regret very much to note the fact that in this advanced age, many eminent medical men allow themselves to be so influenced by every thing that appears new, that their writings upon almost any subject are so extreme and exaggerated, and the claims they make for this or that remedy, or method, so often overstated, that one sickens at the promptness with which he fails to obtain anything like the results claimed for a certain remedy or procedure.

In speaking of the hot bichloride injection method, one enthusiastic surgeon declared that by the adoption of this method by the profession for acute gonorrhea, the work of the genito-urinary surgeon would soon pass away. While another, equally prominent, regards this method as a lurid failure, claiming that the nail rubber protector lamp and Halsted glass nozzle will all be soon numbered with medical museum curiosities.

Such extreme and extravagant opinions can not fail to do other than harm, for it must be remembered that each of the investigators cited has his followers, either of whom are doomed to failure and disappointment.

Not feeling at all satisfied with the results of the various treatments of acute gonorrhea usually adopted, and having failed in many cases to obtain a satisfactory termination of the trouble by the various methods now in use, I determined upon the following method :

The patient is first of all made to urinate, thus removing as far as possible all discharge from the urethra.

A fountain syringe holding a half gallon of warm boric, carbolic acid or bichloride solution is kept constantly on hand (these solutions are very mild, the bichloride being about one to 40,000—the others being about one to 10,000), with which the urethra is thoroughly cleansed by permitting a constant stream to flow into it through a Halsted glass nozzle, which serves the double purpose of permitting the stream to pass into the urethra at the same time plugging, as it were, the meatus sufficiently to enable me to fully distend the canal, thus insuring a thorough cleansing, while at the same time the hot water acts soothingly upon the inflamed membrane ; from a pint and a half to a quart is permitted to run in and out of the urethra at each sitting.

After this, the endoscopic tube warmed and anointed with glycerine is passed into the urethra and by the aid of electric light I am able in many cases to locate the extent of the inflammatory action.

The passage of the tube gives rise to

very little pain ordinarily and if it does I inject $\mathfrak{5i}$ or $\mathfrak{5ii}$ of a ten per cent. solution of cocaine, after which the instrument passes without trouble; this is only necessary in very sensitive patients or when the inflammation is very acute.

With my tube in position in the urethra, I take a long nozzle hard rubber syringe previously charged with a solution of nitrate of silver 6 to 10 grains to $\mathfrak{3i}$, of aqua destillata (the ordinary half-ounce hard rubber vaginal syringe will do nicely) the long nozzle is carried down the tube until the point gently touches the urethra at the end of the tube. I then gradually press the piston down, at the same time gradually withdraw the tube, thus bringing every part of the urethra in contact with the solution.

The smarting and burning occasioned by the injection will pass off in, say, ten minutes and the patient will feel quite comfortable after that; this should be repeated if necessary on the third day, while the hot injection of the cleansing solution is to be kept up two or three times daily ; in addition the patient is required, after each washing out, to inject about $\mathfrak{5ij}$ of a solution containing eight grains of boracic acid to distilled water $\mathfrak{3i}$ —or some other mild astringent solution, such as carbolic acid, zinc sulphate and morphine or permanganate of potash.

The character of the discharge should regulate the frequency with which the nitrate should be used, it rarely being necessary to do so more than once or twice. The patient should be directed from the very first to wear a neatly fitting suspensory bandage in order that such complications as epididymitis, orchitis, etc., may be prevented.

The last injection at night should not be taken immediately before retiring as the distension and irritation of the canal will predispose to chordee.

The immediate effect of this treatment is to produce a free purulent discharge (which, of course, I warn my patient to expect) which generally lasts from 24 to 48 hours; the pus is thick and ropy, after which time it begins to diminish in amount and character; it now becomes more watery or milky; be-

coming more and more watery until it ceases altogether, which I have seen it do, in cases that I have been able to keep in their room and bed (two cases) in eleven days each and in five cases, the earliest 14 and latest 27 days. I regret that the largest per cent. of cases are so environed as to make it impossible to secure the desired rest and quietude.

Of course, during the treatment, the bowels should be looked after and kept fairly free, with some saline cathartic, preferably the Rochelle salts; frequent baths should be taken if convenient and absolute abstaining from the use of stimulants and condiments is advisable. As to internal treatment, I generally give the following which I think has proved serviceable :

R.--Soda salicylat. ʒss
Tinct. hyoscyami . . . ʒss
Infus. digitalis q.s., ad. ʒiv

A teaspoonful every four hours, well diluted in water.

This I think tends to neutralize the urine as well as allay nervous irritability and at the same time act as a diuretic.

From the results I have had I am encouraged to continue the method, hoping that the future may prove the correctness of it.

This method is not to be classed among the abortive treatments in the sense in which that term is used, when strong caustic salts are recklessly and blindly used, nor do I claim that every case, regardless of the stage or surroundings, will as promptly yield as those mentioned, but I do claim that in acute uncomplicated cases the above results will I am sure be obtained in a vast majority of cases.

It will be remembered that a year or more ago I reported a series of cases treated by the mild hot bichloride solution method, using the Halsted nozzle and my own retrojection catheter, in which I used large quantities of the solution at each sitting (say one-half gallon or more) with evident benefit, but as I found it very difficult if not impossible to get any number of cases to present themselves as often as that method (to be efficient) required, I determined to

carry my experimentation further along that line, using stronger and stronger solutions with varying unsatisfactory and satisfactory results. I found a one to 5000 or 10,000 bichloride solution very irritating, producing at times severe burning and pain, often chordee at night, which had to be relieved by an anodyne in three cases, one where a 5000 solution was used and two where a 10,000 solution was used; I had pain, hemorrhage and retention to rapidly follow. The bichloride solutions seem to have the power of producing a peculiar dryness of the mucus lining of the urethra which makes urinating very painful, at the same time the swelling goes on with seemingly increased vigor. I have therefore come to the conclusion after trying solutions of salicylate of soda, permanganate of potash and chloride of sodium that all of these solutions should be used only as cleansing solutions and in strength sufficiently mild to prevent irritating the mucous lining of the tube; when thus used, they also act incidentally by retarding the activity of those germs which still adhere to the mucous membrane, as well as a soothing lotion to the highly inflamed membrane.

Frequent microscopical examinations in a considerable number of cases prove the above statement regarding the action of these drugs on the micro-organisms of gonorrhea, while the stronger solutions had a more decided effect upon the organisms; it also had a decidedly more disastrous effect upon the lining of the urethra while the strong nitrate of silver solution, applied only once or twice at stated intervals, seems to have a decidedly salutary effect in contracting the over-distended capillaries, thus bringing about a healthy reaction by which the mucous membrane is enabled to throw off the imbedded micro-organism.

CURIOSITIES OF APHASIA. — Pitres states in the *Journal of Eye, Ear and Throat Diseases* that in recovery from aphasia in persons who speak several languages the mother tongue is first restored, and the use of dialects and idioms is next regained.

PRACTICAL VERSUS SCIENTIFIC MEDICINE.

By A. D. Mansfield, M. D.,

Late Assistant Surgeon Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore.

A CLOSE student of the conditions that confront the medical men of the present age cannot fail to discover that medicine and medical treatment have a scientific as well as a practical aspect, and that too little attention is paid to the management of medicine from the practical business standpoint. There is so much of the scientific and too little of the practical; within the past decade medicine has changed wonderfully. We have seen medicine in the broadest sense divided and subdivided into specialties and subspecialties. On the one hand, we find men devoting their energies to the accomplishment and perfection of some specialty from a scientific standpoint, without any regard whatever to the practical side of medicine, viz.: the application of the knowledge to humanity for the necessary remuneration to make a living; on the other hand, we find men devoting all the knowledge they can obtain, through reading and other channels, to the one end—making such application repay in money.

Very often men of trade reap all the pecuniary benefit to be derived from the efforts of medical men and men without medical training are applying the results of research of medical men. I believe that the medical man should attend more to the practical side of medicine, especially when we live and move in such a practical age. Should our forefathers of the early part of the century come to visit medicine now, how much astonishment would characterize their actions, so much has the realm of the possible invaded the long thought territory of the impossible. Some men enter medicine apparently to make an honorable living for themselves and their families, others may take up medicine with the idea of amassing immense fortunes, but few are successful in this. How many of the world's rich men are numbered amongst the medical profession? Again, very

few men enter medicine with means sufficient to pass their days in research in scientific medicine. It is a laudable desire to advance the science of medicine as a science, but not all with the money have such inclinations. Most of us enter medicine as men enter other callings of life; they are attracted to it, but they nevertheless look to the profession for a livelihood; they spend years in preparation and are equipped mentally to pursue the calling of medicine. They find in medicine a calling suitable to their tastes, and as a means of supplying in moderation the necessities of life.

Do medical men sufficiently attend to the practical side of medicine? Is it a practical business method to continue to attend patients who persistently refuse to pay their bills? Is it a practical business method to allow patients who are able to pay for services rendered to receive such services at our free dispensaries for nothing? Let any one be known to the commercial world as "poor pay" and see how quickly business methods are employed. But you say medicine is above all such—pure nonsense. Medicine is just what the medical men make it. Medical men are lax in their methods in managing their business and people take advantage of that laxness. The public knows that if Dr. Blank insists on being paid that Dr. Next-Door will treat them even though he knows the patient owes Dr. Blank a large bill. The people generally know that Dr. Next-Door has no intention of helping Dr. Blank get his just bill, even if he is not paid for it himself. Do business men argue that way? If a man does not pay Mr. Dry-Goods he cannot contract a bill at Mr. Jeweler's. Again, the medical men generally do all in their power to send unworthy patients to free charity dispensaries that should not be sent there by anyone, much less by medical men,

and people are quick to grasp this situation and recognize the bad business principle that exists in going to a free dispensary when they know that they have no right; yet, Dr. Blank sends them and Dr. Young at the hospital must treat them because Dr. Old, who heads the institution, insists upon it, so as to make a creditable showing in the hospital report.

These two principles, well-known to exist in medical practice, are bad business principles and at their door can be laid much of the existing depression in medical practice. If medicine were conducted upon sound business principles, the same honorable principles that are used to conduct any other legitimate business, medicine would be extremely profitable. Merchants give no further credit when you refuse to pay your just indebtedness. Many a doctor will continue to carry a family along, when that patient refuses month after month, year after year, to pay his increasing bill.

It is this practical side of medicine to which I wish to call your attention. I do not wish to be understood for one moment as disparaging the scientific side, but I do wish it emphasized that if a man is to make a living by the knowledge he possesses he should be permitted to use the same honorable means that are legitimate in other callings of life. I most strenuously object to the antiquated code of medical ethics because everything else in medicine has changed except this unreasonable code of ethics and the best place for it is the fire of eternal futurity. How many observe it as it reads? Analyze the actions of the men you come in contact with in your daily life. I will make no definite statement as to how many observe it, but leave that to each individual to answer for himself. Scientific researches are but the basis for the application of practical medicine, for through the scientific we are surely enabled to put into effect the practice of medicine and we leave too often the application of medical truths to others and as well the consequent financial remuneration. It is almost a monthly occurrence that we find a scientific truth that has just been

discovered turned by practical methods to vast profits.

The time has come when medical men must either be practical or retire to the absolute scientific studies in medicine. Who is more capable of the application of a scientific medical truth than the medical man? What prevents him other than that antiquated and unreasonable code of medical ethics? I quote from an editorial in the *New York Polyclinic* of September 15, 1896, in which the editor in part says: "Hundreds of young men today are eating their hearts out in the vain endeavor to earn an honorable livelihood in medicine, compelled as they are to conform to the antiquated and ridiculous code of ethics that has been handed down to us as a sole relic of a narrow-minded, unscientific and bygone era." The trouble is that the medicine of today is so intensely scientific that it cannot look up and see the high wall of ethical stones that is built around about it. But like the walls of China, they must succumb to the advances of the ages, and so with this code of medical ethics, it must be broken and will be broken some time. Medical charity abuse is a practical subject and by no means a scientific subject and I am glad to notice that the Medical Association of the District of Columbia has taken some active steps to correct this medical charity abuse in Washington and trust their efforts will be crowned with success.

It is high time the men of Baltimore were doing something of the kind. An opportunity was offered but it was not seized. This subject of medical charity abuse has been presented on previous occasions by the writer and, like all other efforts at reform, has met with praise as well as criticism. It may be somewhat edifying to give briefly the line of criticism, not in print but private conversation. It is suggested that first agitation will do no good and that often it is not well to speak the truth and present facts.

Agitation will stop only when the cause of agitation is removed; the agitation is not at fault, it is the cause of agitation. Agitation is but the expres-

sion of a certain number of aggrieved persons through one who is bold enough to express what the mass think. The writer has been told to turn his attention to a scientific subject and stop agitating a recognized and admitted evil as it will only drive away donators who give largely to the support of charity and charitable institutions. If my agitation will open the eyes of people who think all the money they give goes to pure charity, and if the open eyes will only behold what is to be seen, then the agitation has accomplished the end desired. Charity is commendable but charity covers more than a multitude of sins.

Let donators cease giving, for the money they give does not accomplish the desire of the donator but accomplishes the desires of the distributors. When anyone gives a donation the desires of the donator should be carried out and no man is rash enough to donate money to treat people that are as well able to pay as the donator. I am gratified that donators are having their eyes opened and I trust that the larger donators, Congress, State legislatures and municipal councils will also have their eyes opened and demand of the hospitals strict censorship or self-support. Now

medical charity abuse is an up-to-date living, practical medical topic. The question, "Can the abuse be corrected?" is another practical question. Will medical men be forced to become more practical in their methods to keep pace with the changes of the present age? Yes, I think they will and it is only a question of time when medical men will change their methods. Some may hang on to the scientific ideas and allow practical methods to men outside the ranks of medicine and allow them to walk off with all the profits.

I am sorry to say that some so-called regular medical men in so-called good standing do things that are irregular, even from a general moral standpoint, to say nothing of a medical ethical standpoint and worse, still, their confrères are perfectly cognizant of what is going on and blink their medical eyelids. It is the old saying "It is not wrong to steal, but it is a crime to be found out." Work can be done underhand and pass unobserved even by those knowing it, but open, honorable and legitimate efforts, if not in conformity with antique customs and narrow-minded views, are condemned. The time is rapidly approaching a crisis when changes that must happen will be accomplished.

BACKWARD DISPLACEMENTS OF THE UTERUS.

In a very elaborate article on the treatment of backward displacements of the uterus, in the *American Journal of the Medical Sciences*, Dr. Howard Kelly concludes that operative measures are only to be resorted to for the relief of retroflexion in those cases in which there is good reason to believe that the displacement seriously interferes with the patient's health and comfort. Then, if the case is one calling for operation in a woman who has borne children, first always look well to the vaginal outlet, and restore it, if it is broken down. The Alexander operation, as performed by Edebohls, will yield excellent results; his

personal preference is to deal directly with the retroflexed body of the uterus by a suspensory operation.

TREATMENT OF GASTRIC HYPER-ACIDITY BY METHYL BLUE.

BERTHIER reports in the *Therapeutic Gazette* that methyl blue can be used with advantage in this condition, the dose being one to three grains each day for several days. It is then discontinued for three or four days, and then used again. He claims that it abolishes the pain, re-establishes normal digestion, suppresses any tendency to vomiting, and relieves hyperesthesia of the stomach and gastralgia.

RESIDUAL URINE OF URETHRA.

By Stuart McGuire, M. D.,

Professor of Principles of Surgery in the University College of Medicine, and Surgeon to St. Luke's Home, the Virginia Hospital and the Home for Incurables.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, DECEMBER 8, 1896.

THE penis is both a urinary and a sexual organ, and, like all compromises, has certain defects which render it liable to disease. Disorders of the kidney and bladder affect its sexual function and venereal troubles cripple it for the discharge of its urinary duty. So intimately are the two associated, that in treating disease of the one the possible influence of a pathological condition of the other must be constantly considered.

There is no condition met with in genito-urinary practice so difficult to cure as chronic posterior urethritis. I do not propose to discuss the disease systematically in this paper, but I want to call attention to the fact that in many cases the condition is maintained and the treatment frustrated by the presence of residual urine in the urethra. It has long been known that a few drops of urine may be retained behind a tight stricture, but I have been unable to find mention of the possibility of a considerable quantity of urine being left in a dilated portion of the urethra and acting as a causative factor, or as an obstacle to the cure of the disease.

The urethra is not a tube of uniform caliber, but has points of physiological narrowing. It is divided arbitrarily by anatomists into three portions—the spongy, the membranous and the prostatic; by surgeons into two—the pars anterior and the pars posterior. The urethra has two curves—one fixed by the prostate, the other movable and depending on the position of the penis. When urine passes through the urethra, it is propelled not only by the *vis a tergo* of the bladder, but by the contraction of various muscles, and the channel is normally emptied of the last few drops of fluid by a progressive wave of blood which flows from the bulb through the corpus spongiosum. A careful study of the anatomy of the urethra will at once

suggest the possibility of urine stagnating at certain points and a review of the physiology of micturition will show how nature has seemed to foresee the evil results which would follow and guard against its occurrence.

It was my misfortune, at the very beginning of my professional life, to have several patients with chronic inflammation of the deep urethra. I treated them with indifferent success, and, from my inability to cure them, attributed the symptoms of which they continued to complain to sexual neurosis or hypochondriasis. Finally, I bought an electric urethroscope and began to examine systematically every case of chronic urethral trouble that came into my office. At first, I accomplished little; but after I became familiar with the healthy and the diseased appearance of the mucous membrane of the canal and learned by experience what local applications did most good, my results were very gratifying.

In several different cases, when I looked down the tube, I almost invariably found its end filled with fluid and so constant was this condition that I expected to find it and had a mop ready to remove it. I did not at the time appreciate its significance and supposed that I had introduced the instrument too far and had dilated the sphincter of the bladder. Last winter a patient came to see me suffering with chronic posterior urethritis, but, in addition to the usual symptoms, he said that after urinating his trouble was greatly increased and that he could only obtain relief by stroking his perineum firmly with his finger from behind forwards and thus milking out about half an ounce of urine which remained in the deep portions of the urethra. The passage of a No. 30 sound failed to detect a stricture and I was forced to the conclusion that the

residual urine was not dammed back by an obstruction, but was retained in a dilated and inelastic pouch of the urethra. I have now the record of four other similar cases, the quantity of retained urine varying from one drachm to half an ounce.

Residual urine of the urethra may be caused in one of two ways, or by a combination of both. Either there may be a stricture of the urethra, and the urine rushing down from the bladder meets with the obstruction, and by hydrostatic laws expands the portion of the canal behind the stricture, and the repeated distension causes the part to lose its elasticity and contractility and remain patent; or there may be no stricture, but a chronic inflammation of the mucous membrane and adjacent structures may so lessen its tone and relax its tissues that dilatation and sacculation follow. In both cases, the result is the same; urine is retained in the urethra, and, undergoing decomposition, irritates its sensitive surface and produces distressing symptoms.

It is a question whether residual urine in the urethra is the cause or the consequence of chronic posterior urethritis. The practical fact is that the condition cannot be cured until it be removed.

The treatment of such cases must be moral, hygienic, constitutional and local. The patient is in a state of mental depression bordering on sexual neurasthenia. He is as morbid and hysterical as a woman with "womb disease." By kindly sympathy and judicious encouragement, the surgeon should win his confidence and overcome his fears. The patient's diet should be restricted, his bowels regulated, and a moderate

amount of exercise advised. If he be married, sexual intercourse need not be interdicted, but if he be single he should remain continent, and carefully avoid all possible sources of excitement. Tonics are frequently useful; if the patient be weak, and has no appetite, give him a bitter stomachic like tincture of cinchona; if he be pale and anemic, give him large doses of tincture of the chloride of iron. Direct him to "strip" his urethra after emptying his bladder; and if his urine is concentrated or irritating, instruct him to drink large quantities of some pure light water. Salol, or some other drug which is eliminated by the urine, and by its antiseptic properties prevents its decomposition, may be frequently used with benefit.

The local treatment is of great importance. The first point to be determined is the presence or absence of stricture. If it be present, it should be dilated by the systematic use of large sounds. If it be absent or if the symptoms continue after it has been removed the case should be treated by making stimulating applications directly to the diseased area. The whole length of the urethra should be rigidly inspected with the urethroscope and the congested spots, granular patches, or superficial ulcers, accurately located and carefully touched with a solution of nitrate of silver, the strength being varied to suit the requirements of the individual case.

Before the development of urethroscopy urethral lesions were unrelieved because unrecognized. We live in an age of accuracy and precision, and with modern instruments have no excuse for empiric practice.

THE PREVALENCE OF MALARIA.

"In my opinion," says Dr. Charles M. Ellis of Elkton, Maryland, "the malaria bacillus in some form or other is at the bottom of almost one-third of the diseases in general practice, and complicates almost all of the others. When the malarial affection is at its greatest intensity it dominates all the processes

of the human frame. I never yet have seen a case of true remittent fever. In all the cases I have had, generally answering to that type, there has been no eventual doubt but that it was typhoid. I have seen many cases of so-called malignant malaria, but I have never had any doubt in all but that they were typhoid."

Society Reports.

BALTIMORE MEDICAL ASSOCIATION.

MEETING HELD OCTOBER 26, 1896.

THE President, Dr. Randolph Winslow, in the chair.

There were no reports from committees.

Dr. Crutchfield proposed for membership Dr. J. G. Jeffers, 1143 W. Franklin Street.

Dr. John D. Blake read a paper on the TREATMENT OF ACUTE GONORRHEA. (See page 199.)

Dr. E. G. Waters asked how his present method compared with former methods both as regards time and efficiency.

Dr. Blake replied "very favorably, and it bids fair to be an improvement over former methods."

Dr. Winslow asked if this method is used in all cases of acute gonorrhea and what is the fee?

Dr. Blake: He uses it in every case. The fee depends upon the circumstances of the patient.

Dr. E. D. Ellis thought that a fountain syringe is a rather cumbersome appliance to be employed in this trouble. Infusion of digitalis is unnecessary. To increase the quantity of urine the use of water would answer better. Salicylate of sodium answers well to alkalinize the urine. Rest in bed is very important.

Dr. W. Guy Townsend reported a case that recovered quickly after the cutting of a stricture.

Dr. C. Urban Smith asked how much of the 10-grain solution of nitrate of silver he injects.

Dr. Blake thought that Dr. Ellis is wrong as to the action of digitalis. He always has a microscopic examination made. He has seen cases in which he could not find gonococci and yet the trouble was undoubtedly gonorrhea. In simple urethritis the membrane is not so edematous. He rarely injected more than two or three drachms of the solution of nitrate of silver. He believes that a solution of common table salt answers as well as a bichloride of mer-

cury solution; it renders the fibrin less tenacious.

Dr. Winslow said that this plan of treatment was recommended in Vienna when he was there twelve years ago.

Dr. J. W. Chambers thinks that in the end this treatment will not prove to have any advantage over others. He does not think that by any method gonorrhea can be definitely distinguished from simple urethritis. Even a microscopic examination will not always tell.

Dr. Blake: Gonorrhea can be diagnosed by the appearances just as we recognize gonorrheal ophthalmia. The history will often aid in making a diagnosis. Patients with gonorrhea would not leave their physician so frequently if the doctor took more interest in them.

Dr. Winslow exhibited a specimen of osteoma of the upper jaw removed from a boy aged 12 or 14 years. The antrum had been opened under the impression that it was malignant. The tumor had existed less than a year. The patient had had trouble with the nasal duct. He tried to remove it without interfering with the alveolar process, but four teeth came with it. He thinks that there will be but little deformity.

Dr. Chambers mentioned the case of a lady from whom three years ago he removed the superior and the inferior maxillary on the same side and there is no deformity.

The Association then adjourned.

EUGENE LEE CRUTCHFIELD, M. D.,
Recording and Reporting Secretary.

RICHMOND ACADEMY OF MEDICINE AND SURGERY.

REGULAR MEETING, DECEMBER 8, 1896.

THE President, Dr. Landon B. Edwards, in the chair. Dr. Mark W. Peyser, Secretary and Reporter.

Dr. Stuart McGuire read a paper on RESIDUAL URINE OF THE URETHRA. (See page 205.)

Dr. J. W. Henson said that there was such a thing as residual urine of the urethra, there could be no doubt, and it was a matter of considerable importance. While residual urine caused

posterior urethritis, he was convinced that local posterior urethritis might and did bring about the condition of residual urine in the urethra.

The surgical posterior urethra was emptied by the rhythmical action of the levator prostatae, compressor urethrae, accelerator urinae, and the muscular fibers surrounding the urethra beneath the submucous coat. When there is a point of inflammation, there is, of course, some swelling; but added to this, the muscle at that point, or some of its fibers, assumes a spasmodic action, the rhythm above mentioned is interrupted, and the deep urethra fails to be completely emptied. Question an intelligent man, and he will tell you that after passing urine that is highly concentrated, he is sometimes conscious of being unable to empty the deep urethra for ten minutes or more, when, the local irritation having subsided, the same muscular effort at first used easily accomplishes the act. Now, of course, when the local irritation is continuous, as in inflammation, the spasm is longer or continuous, with retention of urine back of the irritated point. Residual urine is oftenest only a few drops, but this, by decomposition, is sufficient to greatly intensify the inflammatory action and hasten the formation of stricture. He thought it not improbable that urine was retained by the sharp bending of the urethra which occurs just in front of the scrotum when the penis is pendulous. This would occur, of course, only when the organ is replaced before being thoroughly emptied after urination.

In order to properly grasp the situation of affairs in posterior urethritis, or any urethritis of a chronic character, and intelligently treat the same, the use of the endoscope is necessary. To attempt to manage a case without this instrument would be a much more serious blunder than treating a sore throat without inspection. Many a patient has been told he had nothing the matter with his sexual organs, while the fact was he had, and, as a result, nearly or quite became a lunatic. The reverse is equally true. It is a serious matter.

He congratulated Dr. McGuire upon his paper.

Dr. W. T. Oppenheimer agreed with Dr. McGuire throughout regarding the employment of the endoscope. The urethra was a closed tract, not admitting of air, and the folds might be seen closing behind the instrument. Minute inflammatory points as results of gonorrhea, uric acid crystals, etc., residual pus, mucus that might be mistaken for urine, all could be found. The urethra should be fully dilated with the instrument so that ulcerations might not be hidden by the folds. The endoscope was certainly a great advance in the treatment of urethral troubles; but it must not be introduced in acute inflammations. In his experience, deep injection of a solution of atropine stopped secretions, and in the more acute forms, he used it in combination with other remedies.

Dr. Stuart McGuire, in closing the discussion, said that the paper he had read had been hurriedly written, and that it was merely intended to be suggestive. His object in reading it was to endeavor to establish a clinical fact, namely, that in certain cases of chronic posterior urethritis there was a retention of a considerable quantity of urine in the urethra, which was either the cause of the trouble, or a complication which made it difficult to cure. He dwelt upon the importance of using the urethroscope in such cases, and exhibited various electrical illuminating apparatus, and demonstrated, practically, their operation. He concluded by urging the profession to be more accurate in their work, and begged that in future they would not diagnose urethral symptoms as neuroses until by a careful examination of the entire length of the urethra they had demonstrated the fact that it was free from abnormalities.

MEDICINAL CATARRH. — *Dr. George Cohen* reports, in the *American Journal of the Medical Sciences*, that he gives five minim doses of belladonna tincture to each ten grains of potassium iodide to control the coryza caused by the latter drug.

Correspondence.

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Philadelphia, Dec. 24, 1896.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—I would be pleased to have an expression of opinion as to the relations of the lay publishing firms of medical journals and the profession. The request is suggested by the fact that Messrs. Wm. Wood and Company of New York refuse to permit the editors of "The American Year-Book of Medicine and Surgery" to use in our abstracts of Medical Progress articles and illustrations first printed in the *Medical Record* and the *American Journal of Obstetrics*.

This decision seems to me to be wrong for the following reasons:

1. It Prevents the Dissemination of Medical Knowledge. The Year-Book condenses, systematizes and criticises the year's medical work in a shorter space and more permanent manner than the journals, and has thousands of readers no single journal can claim, or hope, to reach. Every physician writes and publishes articles in order that every member of the profession may, if possible, learn of his work, and that science and progress may thus be furthered and humanity benefited. To interfere with such dissemination of our literature in reputable publications is, I think, discourteous and unjust to the profession and an injury to medical science.

2. This injustice and injury to medicine becomes all the more striking when physicians do not receive a cent of pay for contributions, from the publication of which the lay publisher is supposed to make considerable financial profit.

3. No other publishers in the world, not even those who pay authors for their contributions, have in the least objected to our reproduction of quotations, abstracts and illustrations from their journals.

Do you wish to limit the dissemination of your contributions to medical science by such an exclusion of them on the part of publishers from reputable

publications? Is this literature the property of yourself and of the profession or not? Does your gift of it to a journal make it the private property of the publishers of that journal? Is it not rather a loan for temporary use only?

Will you not hereafter demand that there be printed with your article a statement that the right of abstracting the text or reproducing illustrations is guaranteed?

Yours very truly,
GEORGE M. GOULD.

119 S. 17th St.

Medical Progress.

REPORT OF PROGRESS IN PEDIATRICS.

By A. K. Bond, M. D.,
Clinical Professor of Diseases of Children,
Baltimore Medical College.

SCHOOL ASEPSIS IN INDIANA.

DESK-TOPS and banisters are to be washed with soap and water and afterwards with a disinfectant, for germs from their inviting surfaces may get into children's mouths. Large tin cups and buckets of drinking water are condemned, as receptacles for the distribution of spittle and disease-matters. Covered water-vessels with full stream of water and small tin cups which are flushed out at each filling are to be used.

Slates are condemned as unclean or usually spittle-cleaned. When damp they collect dust and transmit disease. Pens and pencils are to be sterilized (daily?). Spitting upon the floor is filthy and unnecessary. The firing of germ-infected missiles, called spit-balls, across the schoolroom is unworthy of modern warfare.

CROOKED FEET.

There ought to be a city law giving to the Society for Prevention of Cruelty to Children the right to arrest and commit to orthopedic hospitals these little waifs who waddle around the streets, walking on the outer or inner malleolus. Such deformities may without difficulty be corrected and suitable apparatus will give a life of possible usefulness to an otherwise life-long pauper and cripple.

In the *New York Polyclinic*, September 15, Dr. Whitman testifies to the neglect and ignorance often manifested by the family physician on this subject (that of the parents is often beyond words of reprobation) and assures us that even after as much as six years of neglect, such limbs may be restored to usefulness except in so far as fetal faults of development or disuse-shortening are present.

MILK ESCAPE BY TRACHEOTOMY WOUND.

Dr. Cameron, in an exhaustive paper on troublesome complications of tracheotomy, *British Medical Journal*, September 12, refers to the escape through the wound of fluids swallowed. Sometimes it is so great as to interfere with nourishment. Milk getting into the larynx seems to do no harm, not even causing choking. One patient regularly passed half his milk through the wound into a saucer. It is not due to ulceration into the esophagus, nor to interference of the tube with rising of the larynx in swallowing, nor to diphtheritic palsy; but to temporary loss of sensitiveness in the part of the larynx. Feeding through a stomach tube is hardly necessary, as by slow swallowing, or the use of curd and meat jellies, escape by the wound may usually be avoided.

CEREBRAL PNEUMONIA.

There is a group of acute fibrinous pneumonias of childhood which are ushered in by severe brain symptoms (restlessness, coma, delirium, headache, vomiting) the very picture of an acute meningitis. These symptoms are probably due to high fever acting on a very sensitive nerve system. The lung signs do not often appear until the fifth day, and are then obscured by the nerve symptoms. In one case abnormal temperature, facies, coma, delirium, teeth grinding, all indicated meningitis, but when the temperature fell on the sixth day the lung symptoms took the first place. Pneumonias of the apices are especially associated with meningeal symptoms.

CONGENITAL HIP DISLOCATION.

Every now and then the community is scandalized by the discovery that

what the family doctor or even the hospital professor (sometimes a number of each) have considered as a neuralgia or as a congenital shortening of bone and have for years neglected or maltreated has really been a dislocation all the while. In *Pediatrics* for September 15, Dr. Willard describes an anterior displacement of the head of the femur upon the ilium in a boy of eleven years. It was probably fetal in origin or a birth injury. It was quite easy to diagnose, the head being clearly felt rotating. Abduction is chiefly interfered with; treatment, prolonged extension in bed.

BACTERIOLOGY OF INFANTILE DIARRHEA.

The fermentation changes of the small intestine are more important in health and disease than the putrefactive changes of the large intestine. The former are very obscure, as the small bowel cannot be properly explored in life (Dr. Hemmeter of Baltimore has invented a tube for duodenal observation). Poisoning by absorption from small bowel is now said to be due to excessive action of normally healthful and helpful organisms, many varieties of which may in disease produce excessive fermentation, transformation of food products, and so cause disease-symptoms. Researches in summer diarrhea should therefore be directed toward an understanding of the conditions and changes of milk in hot weather, on account of which the organisms of fermentation act in an unwholesome and excessive manner, not stopping at the ordinary lactic acid fermentation of the milk sugar, but attacking the proteids.

TREATMENT OF ENLARGED GLANDS.

The consensus of opinion endorsed the delay of incision until suppuration begins, as shown by a peculiar elasticity of the gland to the touch. One should not, however, wait for fluctuation—especially should involvement of the skin in the tubercular process be headed off. The advantage of suppuration within the gland is that the tubercle bacillus is supposed to then become less active. The whole suppurative gland should be dissected out if possible, usually after

partial emptying. One writer urged swabbing out the incision cavity with undiluted carbolic acid which destroyed all suppurative organisms. Dilute carbolic acid may be absorbed and poison. Under dressing with iodoform worsted (better than gauze, being white double Berlin wool boiled twenty minutes, wrung out in 1 to 1000 solution bichloride, cut into 18 inch lengths, and rubbed with sterilized crystallized, finely ground iodoform) these heal quickly. If periglandular suppuration occurs the abscess must be scraped and mopped with pure carbolic acid before enucleation of the gland. Incisions should be as small as possible. The hair should be bound away with wet gauze antiseptic bandages. Great caution in operating in front of the ear is urged lest salivary fistula be left.

INFANTILE CEREBRAL PALSY.

Attention of orthopedists has heretofore been directed chiefly to the improvement of spinal palsies of children. But cerebral palsies though slow, promise much to patient treatment. Not only may tenotomy and splints improve the muscular force, but they also, by stopping the irritation of muscular nagging, promote quiet of brain and are followed often by mental improvement. Great harm is done by preventing all exertion of mind and body on the part of the patient (excessive coddling). Dressing and undressing, feeding, use of playthings and tools may all be permitted to the paralytic who can use his hands at all. Kindergarten and mental exercises may aid.

* *

EXTRACTION OF TEETH AND FACIAL PARALYSIS.—In the *Lancet* a note on this subject is published by Dr. Frankl. Hochwart, in which he gives an account of six cases which he has observed. In the first case the patient had had an attack of facial paralysis seven years before, and the second attack, which affected the same side, came on the day after the extraction of a tooth, also on that side. In the next three cases complete facial paralysis came on a few

days after extraction of teeth and without any other complication, and in these cases the paralysis was on the same side as the extraction. So it was in the sixth case, while in the fifth it was on the opposite side. Dr. Hochwart does not regard the actual extraction as the direct cause of the paralysis, but rather the condition of inflammation which renders extraction necessary or, at least, desirable; and he points out the fact that injury to a tooth may cause paralysis to anyone with a predisposition, as was the case in a young woman who suffered from a third attack of facial paralysis after the accidental breaking of an incisor. He also thinks that inflammation about the teeth may cause paralysis even if extraction has not been done.

* *

OPERATION FOR HYDROCEPHALUS.—Dr. A. Henle (*Medicine*) reports a case of hydrocephalus in which he operated by making a skin-periosteum-bone flap and introducing a small packet of glass wool in the form of a thick nail through an opening made with scissors into the lateral ventricle. The wound was closed by means of skin sutures over the piece of bone which had been turned back into place. He says the indication for operation in cases of hydrocephalus is only given by constant and rather long existence of the disease when dangerous or threatening symptoms of brain-pressure are to be combated.

* *

SAND FILTERS.—Allen Hazen (*Medical Record*, November) concludes: "The city of Philadelphia is now using water in a most wasteful and extravagant manner, and immediate measures should be taken to check such waste, and to reduce the consumption to a reasonable amount. It is possible to construct sand filters similar to those in use at London, Hamburg, and many other European cities in connection with the existing pumping stations, of sufficient capacity to furnish water for all reasonable requirements, for the present population, and for that which may be expected in the near future."

MARYLAND Medical Journal.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, JANUARY 2, 1897.

In a previous number of the JOURNAL the indications for excision of the pylorus were discussed and the opinion

Gastro-enterostomy. was expressed that pylorotomy for cancer ought not to be performed, except in a very small proportion of cases in which the growth was strictly limited to the pyloric region, without adhesions to surrounding organs, and without metastases. The immediate mortality of the operation is about 75 per cent. and in no case has a radical cure been obtained.

As a substitute for this dreadful operation, gastro-enterostomy or the formation of an artificial fistula between the stomach and the jejunum ought to be done. This operation was first performed by Dr. Woelfler, First Assistant to Professor Billroth of Vienna, in 1881, in a case of inoperable cancer of the pylorus. Dr. Woelfler exposed the stomach for the purpose of excising the growth, but finding the disease too extensive for this procedure, he attached a loop of intestine to the anterior wall of the stomach, and established a com-

munication between the two. The patient recovered from the operation. Since then the operation has been recognized as a legitimate procedure, and has been done many times by surgeons, with excellent results.

The mortality of gastro-enterostomy is also very high, but this is on account of the delay in its performance, until the patient is in the last stages of exhaustion from starvation. The technique is not difficult nor is the operation in itself dangerous, and if it is performed before extreme exhaustion occurs the results will be very good. There are several dangers inherent to the operation, such as persistent vomiting from kinking of the bowel, or from the entrance of the bile and intestinal fluids into the stomach, due to the fact that the contractions of the stomach and intestine are in opposite directions, but these dangers may be avoided by accurate suturing and by twisting the intestinal loop so that its peristalsis shall be in the same direction as that of the stomach. There is also the danger of leakage from inaccurate suturing or from the cutting out of the sutures; these difficulties are all more or less avoidable.

In order to lessen the time required for the operation, several mechanical aids have been employed, such as the Seinn's bone plates and Murphy's button, by means of which the duration of the operation can be materially shortened. It is doubtful if these appliances will prove of more general utility than suturing.

A median laparotomy in the linea alba between the ensiform cartilage and umbilicus is made, the stomach exposed, and the junction of the duodenum with the jejunum sought for, and the loop of bowel contiguous to this is brought up, twisted into a loop and attached either to the anterior or posterior surface of the stomach at the greater curvature. An opening is made into the stomach and a corresponding one in the bowel, each being from 2 to 3 inches in length, their edges are sutured together and another row of sutures is placed external to and entirely surrounding the first row, and the abdominal incision is closed in the usual manner. Nothing is permitted to be given the patient by the mouth for several days.

The operation is not radical, but it prolongs life in many cases for months and in some cases for several years. Gastro-enterostomy is but seldom indicated in cicatricial stenosis

of the pylorus, as this condition can be better treated by pyloro-plasty or digital or mechanical dilatation.

THE Council Committee of Baltimore, which has recently returned from an inspection of the filter beds of *Water Filtration*. Lawrence, Massachusetts, being, with the exception of Dr. McShane, unskilled observers, probably know little more of the advantages of this method than they did before.

While the combined methods of sedimentation and sand filtration are necessary in a manufacturing town like Lawrence, which is situated on a dirty river receiving the pollutions and sewage from other towns of large size above it on the same river, such methods, while always beneficial, are not strictly necessary in a city like Baltimore, which practically has no town or even village near its water supply.

Intermittent sand filtration and sedimentation is the ideal way of purifying drinking water, but the expense is very great and in a city like Baltimore, which is situated on no river of importance and which draws its drinking water from small streams whose surroundings can with small expense be protected, the time for sand filtration has hardly yet arrived.

THE letter of Dr. Gould in this issue opens a question which has justice on both sides and which would take much

Copyrighted Medical Literature. time to discuss. Physicians are so accustomed to giving away much of their professional as well as literary labor, that Dr. Gould is surprised that the owners of copyrighted literature should object to its being copied. It certainly could not harm the original work and would likely spread its reputation, but when medical journals and books are published by business men who have the very laudable desire of making money out of them, they can hardly be blamed for pursuing business methods.

There is a common courtesy among journals and books that allows quotations and abstractions in part, and it is doubtful if the publications of the Messrs. Wood ever objected to quotations in other journals from their journals, which are two of the few that

are copyrighted. The MARYLAND MEDICAL JOURNAL, in common with many other similar publications, has too often seen its articles and editorials bodily appropriated without due credit. Dr. Gould has, perhaps, a fair reason to feel aggrieved, but business men who issue medical publications for pecuniary reward and not for glory can hardly be expected to be too liberal.

IT is with no spirit of flattery but with a desire of just praise that this JOURNAL notes the completion of the fifteenth volume of the *The Medical Record*. *The Medical Record* of New York—a continuous publication of twenty-five years under the same editor, Dr. George F. Shrady, and the same publishers, Messrs. William Wood and Company.

Dr. Shrady exhibits to his visitors with justifiable pride the little sheet which is "Volume I Number 1" of a journal that has taken such a prominent part in medical education of the day. The success of the *Record* is due to the indomitable energy of the editor and the systematic manner of work by which he so distributes the duty among his assistants that all is done decently and in order and all passes under his skilled eye.

It is only fair to say, however, that the enterprise of this journal in obtaining early news and quick reproductions of important papers and society transactions is due also to the remarkable enterprise of the publishers, who spare no expense to obtain news early at any cost and who give Dr. Shrady *carte blanche* to telegraph a long piece of news or an important society report of any length. The editors and publishers are assured of the congratulations of the medical press of the world.

DR. MANSFIELD still pursues the topic of dispensary abuse and hospital mismanagement with untiring energy. *Dispensary Abuse.* He is probably cutting the ground from under his own feet and is acting in opposition to all men who have a hold on good dispensaries from which to recruit their office practice, but he is preaching the right kind of doctrine and the sooner the profession as a whole are able to see this the better. It will be hard to correct this great evil.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending December 26, 1896.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		15
Phthisis Pulmonalis.....		21
Measles.....		
Whooping Cough.....		
Pseudo-membranous } Croup and Diphtheria. }	32	8
Mumps.....	3	
Scarlet fever.....	23	3
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	5	

Key West is suffering from an epidemic of smallpox.

Bay View Hospital is having an additional kitchen built.

The New York Polyclinic Hospital was partially destroyed by fire last week.

There is a very just complaint of the bad drinking water in and around Baltimore.

The next Pan-American Medical Congress will be held at Caracas, Venezuela, in December, 1899.

In Louisiana the State Board of Health supplies antitoxine free of charge when used on poor patients.

More than one-third of the people of this country live in cities and more than half the doctors are there too.

An experimental filter, with a capacity of 7000 gallons a day, is being put in at the Cumberland water works.

The State Board of Health is anxious to use the emergency fund of \$10,000 to stamp out typhoid fever and other preventable diseases.

The Italian Government has just conferred on the discoverer of the anti-diphtheritic serum the well-merited honor of Grand Cordon of the Crown of Italy.

Professor Du Bois Raymond, Professor of Physiology in the University of Berlin and head of the Physiological Institute, died in Berlin last Sunday. He was born in 1818.

Dr. Louise D. Holmes has received her certificate from the Board of Medical Examiners of Georgia giving her the right to practice. She is the first woman physician licensed in Georgia.

A New York paper says that the mysterious death of a young lady of that city, and whose connections are the highest, may by a false death certificate involve a physician whose name is well known over the whole continent.

The Faculty Committee on General Sanitation will meet a Committee from the State Board of Health next Tuesday, January 5, 1897, at 5 P. M., at the Faculty Rooms, to make arrangements for a general sanitary conference.

The College of Physicians and Surgeons is so impressed with the necessity of a Pasteur Institute in Baltimore that they have decided to send Dr. Ruhräh to Paris to study in the Pasteur Institute there. He will then return and take charge of the proposed Pasteur Institute under the auspices of this college.

The Graefe Gold Medal, which is awarded by the German Ophthalmological Society every ten years, has this year fallen to Professor Theodore Leber of Heidelberg, in recognition of his work on inflammation. The first to whom this medal was awarded was the late Professor Hermann von Helmholtz for his discovery of the ophthalmoscope and his treatise on physiological optics.

Dr. William E. Wysham, a prominent physician of Catonsville, Maryland, died at his home last week, after an illness of about a year. Dr. Wysham was born in 1826 and was graduated from the University of Maryland in 1849. In his early days he distinguished himself as military surgeon by his heroic services. For the past few years he has been health officer of Catonsville. His death is to be greatly regretted.

An exchange says it is easier for an American to get the degree of Ph.D. at most of the German Universities than it is for him to get it at any one of the dozen or more American universities of the highest grade. In Germany, it is the lowest degree given, hardly more than equivalent, if, indeed, it is equivalent, to our Master of Arts. Yet, many among us, who care little for their A.M., would be proud to flourish a Ph.D. from a German institution.

Book Reviews.

STRATAGEMS AND CONSPIRACIES TO DEFRAUD LIFE INSURANCE COMPANIES. An Authentic Record of Remarkable Cases. By John B. Lewis, M. D., Medical Director and Adjuster, Travelers' Insurance Company, and Charles C. Bombaugh, A. M., M. D., Medical Examiner for Life Insurance and Editor *Baltimore Underwriter*. Second Edition. Revised and Enlarged. James H. McClellan, Publisher, Office of the *Baltimore Underwriter*, Baltimore. 1896.

The first edition of this work appeared eighteen years ago and was soon exhausted. The perusal of this book proves that truth is stranger than fiction. Many of the cases are full of romantic suggestions and while the exposing of such methods may show to what extent human ingenuity may degenerate when love of money and a desire to defraud are combined, it also shows how unrelentingly the insurance companies hound such deceits at any cost until the criminal is caught and punished. While the main facts related have been contributed by the two authors and have been gathered from other sources, most of the actual literary composition is from the graceful and scholarly pen of Dr. Bombaugh. In addition to the literary excellence of the book and the fulfilment of the object for which it was written, it is a perfect piece of book work, being printed and bound in the most artistic style. It is curious to note that while there is a table of contents, no numbered pages are given, so that in seeking for a subject the reader is obliged to guess the pages.

A TEXT-BOOK OF MATERIA MEDICA, THERAPEUTICS AND PHARMACOLOGY. By Geo. Frank Butler, Ph. G., M. D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Chicago, etc. Philadelphia: W. B. Saunders, 1896. Pp. 11 to 858. Price, \$4.

In this excellent work the pharmaceutical section is quite full although only tried drugs are retained. The untoward action of drugs and their poisonous effects are distinguished. The correct pronunciation of the words is indicated by accents. The book opens with a section on pharmacology. The pharmaceutical preparations are given in full and the medicines are divided into groups. The book has an excellent index and should be well received.

PRINCIPLES OF THEORETICAL CHEMISTRY, with special reference to the Constitution of Chemical Compounds. By Ira Remsen, M. D., Ph. D., Professor of Chemistry in the Johns Hopkins University, Baltimore. New (fifth) and thoroughly revised edition. In one royal 12mo. vol. of 328 pages. Cloth, \$2.00. Lea Brothers & Co., Publishers, Philadelphia and New York.

There is very little to say of a book like this that has proved itself indispensable. In this revision few changes have been made. The subject is stated in that clear style so characteristic of the writer and this edition will undoubtedly meet with the success of previous editions.

MR. W. B. SAUNDERS of Philadelphia announces, to be sold by subscription only, a new work by Drs. George M. Gould and Walter W. Pyle, to be termed "Anomalies and Curiosities of Medicine." The same publisher also announces "Surgical Diagnosis and Treatment," by J. W. MacDonald, M. D., Graduate of Medicine at the University of Edinburgh, etc.; and "Text-Book of Embryology," by John C. Heisler, M. D., Prosector to the Professor of Anatomy, Medical Department of the University of Pennsylvania.

Practical results from the use of Guaiacal carbonate (duotal) and creosote carbonate (creosotal) in the treatment of typhoid fever and tuberculosis. Abstracted from clinical reports published during the current year. New York, Schering and Glatz.

"Love's Lance," is a new medical bihelot, or condensed medical magazine, which appears in January under the editorship of Dr. I. N. Love, of the *Medical Mirror*. It will be issued on the fifteenth of each month at fifty cents a year.

The Twelfth Annual issue of the Columbia Pad Calendar for 1897 makes the usual necessary desk ornament for lovers of this calendar and the Columbia wheel.

The Antikamnia Company issues an original calendar for 1897. It is well executed, but rather too ghastly to be artistic.

Weir's Index to the Medical Press will not suspend publication, but will be continued as heretofore.

Adipogen. Prepared Cod Liver Jelly, Lehn & Fink, New York.

PROGRESS IN MEDICAL SCIENCE.

FREDRICK G. MOORE, M. D., Boston, Mass.: I am pleased to say that Peacock's Bromides has been of great benefit to me, and a remedy that has been called in requisition in some very severe cases, in which I was particularly anxious to use chemically pure Bromides. I have at all times experienced the very best results from its use, and I take every opportunity to speak to my brother practitioners of its efficacy.

IN the treatment of diphtheria it is of the utmost importance to secure prompt results. Mulford's Concentrated Antitoxine gives results from six to ten hours earlier than ordinary serums. The record of reducing the mortality in diphtheria from an average of 40 per cent. to less than 6 per cent. in 50,000 cases is one to be proud of. That is why Mulford's Antitoxine is preferred and most generally used. Their "Extra Potent" is recommended to secure the quickest results.

TAKES AWAY UNWHOLESOME ODORS.—I have been using Platt's Chlorides for a number of years and find the preparation very efficient in the sick-room as it assists greatly in purifying the atmosphere, taking away unwholesome odors, differing greatly from many antiseptic solutions in not disseminating an unpleasant smell itself. It is very useful in some unhealthy conditions of the mouth and throat.—C. F. ULRICH, A. M., M. D., Wheeling, West Va., President Board of Education, Mem. Amer. Public Health Association.

ADVANTAGES OF THE ELIXIR SIX BROMIDES OVER THE BROMIDE OF POTASSIUM.—Bromide of potassium when given alone has a tendency to produce anemia, digestive disturbances, skin eruptions, marked increase of solid constituents in the urine, and a depressing effect upon the heart. Bromide of soda has none of these effects. The soda prevents gastric ailment, increases the action of the kidneys without affecting the solids, and has no depressing cardiac influence. The ammonia also counteracts the depression caused by the potassium. The iron the elixir contains is a safeguard against anemia. The

cannabis indica aids the soda in preventing the cumulation of the bromides in the system, hence in epilepsy and similar disorders where a bromide has to be long continued, the Elixir Six Bromides is specially valuable. Always use the precaution to give a laxative at least every two weeks when a bromide preparation is to be continuously administered especially if there is a tendency to constipation.—*The New York Medical Journal*, VOL. LX, No. 22.

WE take pleasure in calling attention to a very handsome pamphlet, presenting some practical and interesting facts concerning Tongaline and the different troubles for which that remedy is intended, namely: rheumatism, neuralgia, nervous headache, la grippe, gout, sciatica and lumbago. The brochure is rendered most attractive by being embellished with original drawings and also handsome photogravures of a number of eminent members of the medical profession now deceased. It is the aim of the publishers to mail a copy to every physician in the country, but any who fail to receive such can obtain one by applying to the Mellier Drug Company, St. Louis.

THE ASSIMILATION OF IRON.—In chloroanemia, Warner's Pil. Chalybeate Comp. regenerates the diseased red globules of the blood with a rapidity not before observed under the use of other ferruginous preparations; it adds to their physiological power, and makes them richer in coloring matter. Moreover, being neither styptic nor caustic, and having no coagulating or astringent action on the gastro-intestinal mucous membrane, this preparation of iron causes neither constipation nor diarrhea; as it does not need to be digested in order to be absorbed, it gives rise to no sensation of weight in the stomach, or the gastric pain and indigestion occasioned by other preparations. In women who have not menstruated for many months, the amenorrhea disappears; in others suffering from an anemic state of long duration give Warner's Pil. Chalybeate Comp., one or two after each meal, which will soon restore the blood to its normal state. The small quantity of nux vomica is added to increase the tonic effect, give tone to the stomach and nerves, and increase the appetite.

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Original Articles.

AN EPIDEMIC OF PURULENT INFLAMMATION OF THE MILK DUCTS AFFECTING SEVENTY COWS.

By *Wm. Royal Stokes, M. D.,*

Bacteriologist to the Health Department and Lecturer on Bacteriology to the Baltimore
Medical College, Baltimore,

AND

A. W. Clement,

State Veterinarian.

FROM THE BACTERIOLOGICAL LABORATORY OF THE HEALTH DEPARTMENT OF BALTIMORE.

THE first clinical observation of the probable transmission of disease through milk dates back as far as 1764, when Sagar described a number of throat affections, and aphthous ulcers of the mouth, which he attributed to drinking the milk from a certain cow.

This communication seems to have attracted but little attention at the time, but its correctness has of late been confirmed by the objective demonstration of various pathogenic bacteria in the milk of cows, especially in that of animals suffering from an inflammatory condition of the udder and teats, called garget. Nivens has described an epidemic of diarrhea affecting 160 persons, in which the source of infection was traced to the milk from a cow affected with the above disease. The cultures from this milk showed the presence of the bacillus coli communis, and the streptococcus pyogenes.

Kruger, in 1890, was one of the first to find the pyogenic cocci in milk of diseased cows. He observed many pus cells in a case of suspected bovine tuberculosis, but failed to demonstrate the

presence of the bacillus tuberculosis. He observed, however, many groups of cocci, which proved to be the staphylococcus pyogenes aureus, capable of producing subcutaneous abscesses in rabbits. Guillebeau also examined the milk of 76 cows with inflammation of the udders, and found in all of the cases varieties of the pyogenic cocci, which were often virulent when inoculated into animals. Further similar cases are reported by Karlinski, Escherich, Longard and Adamitz. (References from Report of the Health Officer of the District of Columbia for 1895.)

Clinical Observation.—I was called upon professionally in August to attend a herd of cattle which, as the owners said, were "milking pus." I found a herd of about 70 cows all affected to a greater or less extent. They were all nearly dry and what milk could be obtained was of a thick, yellowish nature. The cows stood in a double row of stanchions. The history obtained, after careful inquiry, was that the disease first appeared in one cow; that the owner's attention was called to the con-

dition of the milk by the retailers who bought it. The infection spread to the rest of the herd with great rapidity, so that in the course of two or three weeks the whole herd had become affected.

These cattle were at the time on pasture, fed twice a day on mill feed and according to the foreman's statement milked regularly. Further inquiry brought forth the information that a strange man had hired out on the farm, who was an experienced milker, but who sought professional advice from the physician attending the family for a sore upon his finger, which he said he got from milking cows on a large dairy farm in York, Pa. This man left the place in about a week, and a few days after his departure the disease appeared in the first cow, soon followed by its appearance in the rest of the herd. Cleanliness and irrigation with warm water gradually caused the animals to become dry, in which condition they have remained up to the present time.

A complete autopsy was made upon one of the cows, but nothing abnormal was made out, with the exception of a purulent inflammation of the somewhat dilated milk ducts. Cultures from the blood of the heart and the internal viscera remained sterile.

Histological Examination. — Sections through the diseased portion of the mammary gland show that the larger milk ducts are dilated, and are either empty, or plugged up by masses of "polynuclear" leucocytes.

This condition, however, is much more marked in the secreting acini of the gland. These are often markedly dilated, and for the most part contain large or small accumulations of pus cells; this process ends here, and there is no sign of inflammation in the surrounding connective tissue, the suppuration having limited itself to the milk ducts and acini of the gland. Although we were only able to secure one autopsy, yet the absence of any local swelling in the mammary glands of the other cows would seem to show that the condition was a similar one in the rest of the herd.

The lymphatic glands surrounding the mamma were found to be normal.

Bacteriological Examination. — The cultures were obtained from two different cows. The methods of procedure were similar in both cases, and the results identical.

The teat was carefully washed with soap and water, and the creamy fluid was then squirted from an affected teat into a sterile tube, without allowing the teat to come into contact with the opening of the test tube. Cultures were made soon afterwards at the laboratory and were also made on the spot from the interior of the diseased udder.

Cover slips showed that this fluid consisted entirely of pus containing a moderate number of short chains of streptococci. Plate cultures in 24 hours showed a moderate number of fine, pin-point, gray colonies, which consisted of short chains of cocci, staining by Gram's method, and the ordinary aniline dyes.

The organisms grew invisibly on potato, coagulated and acidulated milk in 24 hours, formed small gray colonies on "slant," agar, turned litmus agar red, and grew in fairly long chains in bouillon. Gelatine was not liquefied.

Inoculations. — White mice were inoculated subcutaneously with the pus from the udders, and with pure agar cultures. Guinea pigs were also inoculated subcutaneously with the pus, and were given one cubic centimeter of a pure fluid culture of the organism. All of the animals survived these inoculations for several weeks. The capriciousness of the streptococcus as regards virulence, however, is well-known, and this fact does not disprove its species.

From our experiments, therefore, we are of the opinion that we have demonstrated the presence of the streptococcus pyogenes possessing a low grade of virulence.

The study of this epidemic presents several points of interest. Garget has been caused experimentally by wounding the udders, and allowing the wound to come into contact with various non-sterile materials.

Assuming that one or several of the herd may have become affected in a sim-

ilar fashion, or from contact with an infected finger, the gradual transference of the disease from cow to cow can be plainly traced to the hands of the milker, from the history of the epidemic.

The similarity of the process to that of gonorrheal inflammation of the mucous membrane in man is also a point of considerable interest, although, of course, the causes differ.

From our observations gained from the routine microscopical and bacteriological examination of milk, we believe that the dangers of infection can be materially lessened by the observance of a few simple precautions, and by the use of the microscope. Clean hands, milking utensils, udders and stables are of course important.

We have also found many pus cells in the centrifugalized sediment obtained from the mixed specimens from several large herds and in one instance we were able to trace the source of the pus to one cow having a local abscess of the udder. After the isolation of this animal we were unable to demonstrate the presence

of any more pus in the milk from the rest of the herd.

Although we are aware that it is impossible to obtain a perfectly sterile milk directly from the udder of a healthy cow, yet we believe that the presence of many colonies of the staphylococcus pyogenes aureus or streptococcus pyogenes when obtained from a "slant" culture of a single platinum loop made from the milk drawn according to the method mentioned above, renders this fluid unfit for use, especially for infants.

Cultures thus made from the last portion of the milk drawn from a healthy cow are usually either sterile or contain only a few colonies of a white coccus, or other bacteria. On the other hand, the milk of animals suffering from garget shows many colonies of the pus cocci and often contains many pus cells.

In conclusion, we wish to express thanks to Dr. James F. McShane, Health Commissioner of Baltimore, for the interest which he has displayed in this work.

THE RÖNTGEN RAYS, SHOWING THE PRACTICAL UTILITY IN LOCATING HIDDEN BULLETS.

By Arthur Herring, M. D.,

Prosecutor in Anatomy and Demonstrator in Eye and Ear, Baltimore Medical College.

THE X rays, as discovered by Professor Wilhelm Conrad Röntgen of Würzburg, Germany, stands out as one of the greatest and most wonderful achievements of modern science.

The photographing of the invisible is of special value to the surgeon as an aid in both diagnosis and treatment of wounds.

In the report of the following case not only the utility but the necessity of the Röntgen rays in confirming the diagnosis will be self-evident.

On November 16, 1896, Mr. P. E. came to my office with the history of having been shot in the back with a rifle. After removing his clothing, which was slightly stained with blood,

over the seat of the injury, I saw the wound of entrance.

The wound was about 1 centimeter in diameter and had ragged edges. It was situated over the right scapula, about 5 centimeters below the spine and $1\frac{1}{2}$ centimeters from the axillary border. After washing the wound with a bichloride solution, 1-1000, I introduced a sterilized probe and could follow the course of the bullet for about 1 centimeter only. The direction was inward and downward toward the vertebral column.

As the probe revealed nothing more than the probable course of the bullet, I withdrew it and carefully examined the posterior aspect of the thorax. No tender point (excepting around the immediate

vicinity of the wound) or elevation of any kind could be found, but as there was only the one opening, I concluded that the bullet was hidden away either in the muscles of the thorax, or possibly within the thoracic cavity itself. There was but one way to verify my diagnosis; the cathode rays must be brought into requisition. I accordingly took my patient to the Chas. Willms Surgical House, where Mr. B. A. Nelson very kindly and efficiently operated the apparatus.

In order to obtain an even temperature of the Crookes tube and to increase the penetrating power of the rays it was necessary to bring the vacuum tube up to the required temperature gradually.

This required about half an hour. When the tube had reached the desired point there were about 170 volts coming from the Ruhmkorff coil. The patient was then subjected to the X rays.

Standing with the ventral surface of his thorax to the Crookes tube and with the fluoroscope on the dorsal surface, we proceeded to examine him.

When first looking into the fluoroscope (which is covered on its inner surface with the tungstate of calcium, by means of which we obtain an instantaneous picture), you see nothing at all; everything is perfectly black before the eyes, but in a few minutes your eyes become accustomed to the change and gradually as though a mist was passing from before the eyes, you notice the outlines of the ribs; the vertebral column and the margins of the scapula appearing and, finally, the picture becomes as clear and distinct as though you were looking at the bony framework of the thorax denuded of its muscular coverings. As we looked the picture became clearer and the intercostal spaces better defined. Noticing carefully, we located a dark object on the superior margin of the fifth rib, about 2 centimeters from the vertebral column.

On studying this carefully, we came to the conclusion that without a doubt this was the bullet, lodged in the fourth interspace and resting on the upper border of the fifth rib.

Upon using considerable pressure over

the point where the bullet was lodged the patient evinced some pain. On examining the surface of the body again over and around the region of the bullet no elevation or presence of foreign body could be detected, showing conclusively that had it not been for the cathode rays the bullet in all probability would never have been located, as it was between and not external to the ribs.

Professor A. C. Pole, M. D., and Dr. Wanstall were present at the examination and verified the diagnosis. As the bullet is giving him no trouble now and is not likely ever to inconvenience him in any way, its removal was not advised. Although if at any time in the future it is deemed necessary to remove the bullet, knowing its exact locality, it would be a very simple matter to cut down on the foreign body and remove it.

When the patient was last seen the wound was healing very kindly and he was suffering no inconvenience at all from the accident. Thus we see a practical illustration of the usefulness of the X rays in confirming our diagnosis and to a great extent influencing the treatment in gunshot wounds.

For had this bullet not been found the patient would always be more or less in dread of danger, or if the patient was inclined to a neurasthenic tendency he would very likely be ascribing a thousand and one different ailments to the inoffensive bullet. Another interesting specimen was presented by Prof. A. C. Pole, M. D., showing the power of the X rays to penetrate bone. The specimen was a piece of bone 3 centimeters in thickness, and about 5 centimeters in length, in which was imbedded a bullet.

When subjected to the Röntgen rays the outline of the ball was clearly defined, the shadow being much darker than that cast by the bone itself, showing that while bone is to a limited degree impenetrable to the rays, yet the presence of a foreign body within the bone can be clearly defined by the darker shadow it casts.

As the X ray apparatus is very easily manipulated and accessible to almost all practitioners, no surgeon should

any longer be in doubt as to the exact location of any foreign substance impenetrable to the rays in the body, or whether the ends of a fractured bone are in exact coaptation or not.

The numerous applications to which the Röntgen rays may be put are not yet fully known, but may we not hope

with the perfection of methods that all the hitherto hidden recesses of the body may yet yield their tribute to the new light and open to view many, if not all, of the abnormal processes of the living body, as effectually as does the post-mortem knife in the hands of the most skillful pathologist?

POST-DIPHTHERITIC PARALYSIS.

A CLINICAL LECTURE DELIVERED AT THE JOHNS HOPKINS HOSPITAL, OCTOBER 15, 1896.

By Wm. Sydney Thayer, M. D.,

Associate Professor in Medicine in the Johns Hopkins University.

THE two patients which I shall bring before you today are a mother and her child who were admitted to the hospital together on the 15th of last month suffering with diphtheria.

The boy is two years of age; he has always been a healthy child, having had as yet none of the ordinary diseases of childhood. His mother states that four days previous to his admission he had several convulsions, after which he seemed ill; he was not inclined to eat and complained of a sore throat. There was a profuse nasal discharge and a swelling at the angles of his jaws. The day before his entrance to the hospital he was brought to the out-patient department and a diagnosis of diphtheria having been made he was given 500 antitoxine units (Mulford's antitoxine). This was repeated upon the following day just before admission to the hospital.

At the time of entrance the child showed a well-marked enlargement of the tonsils, while both tonsils and a part of the pharynx were covered with a thick greyish-yellow membrane. The membrane extended also on to the velum and posterior surface of the uvula. On the tip of the tongue there was an area the size of a pea covered with a firmly adherent greyish membrane. There was a profuse foul nasal discharge; the temperature on admission was 102°; the pulse 126. The child was hoarse; there was well marked inspiratory dyspnea and it was feared that tracheotomy might have to be per-

formed. It was not known that he had had antitoxine outside and he was given a fresh dose of Behring's number 3 (1500 antitoxine units). The boy did perfectly well; the throat cleared up rapidly; the temperature was quite normal by the 19th of October. On the 21st the patient began to suffer from an interesting sequel which has been observed in a considerable number of cases after the antitoxine treatment. The temperature rose and the child became cross and irritable, while at the same time there developed a well-marked general urticarial eruption. This lasted for a week and was associated with considerable fever; but at the end of the week the urticaria disappeared and the temperature cleared up.

At about the same time that the urticaria appeared, that is within a week after entrance, the mother noticed that the child had difficulty in swallowing; when drinking water or milk he would choke and cough, while often a part of the fluid which he was drinking would flow out through his nose. She also noticed that the voice, which had previously been quite clear, began to have a peculiar nasal quality, while articulation of certain letters became difficult and the child's speech was extremely hard to understand. A little later during convalescence it was noticed that the child manifested no desire to stand; when placed upon his feet, immediately collapsed upon the floor. Of late he has begun to walk, but, as you will notice shortly, in a peculiar manner.

As you listen now to the child's voice you will note that it is impossible to understand without very careful attention what he is trying to say. All letters requiring the closure of the posterior nares cannot be pronounced by him. I ask him to say P or B; as you notice they sound really more like M. The voice has a very characteristic nasal twang; it is much like the voice in a case of congenital cleft palate. You have observed as he drank the water which was handed to him a minute ago how frequently he choked and coughed. This morning the milk could be observed coming through his nose drop by drop as he swallowed. The child is unable to walk alone, and when I take his hand you will notice how unsteady and ataxic is his gait.

If you examine the child's throat you will observe that the velum and uvula hang in a motionless, flabby manner. When he attempts to speak there is scarcely any motion nor is there any active reflex when the uvula is tickled. The knee-jerks are absent. He is too young to allow us to study carefully the loss of power in his legs, but it is easy to appreciate that the legs are weak and flabby. As far as can be made out there is no reaction of degeneration.

The mother is 24 years old and entered at the same time with the child. Her illness began 24 hours before entrance. At this time she began to complain of *bachache*, headache and sore throat. The temperature on entrance was 104.8°, the pulse 104. There was a well-marked grey diphtheritic membrane on the upper part of either tonsil, extending upwards a little way on to the velum. On the day of entrance she was given a bottle of No. 1 Behring's antitoxine, that is 500 units; on the following morning she was given 1500 units. During the first 24 hours the membrane extended to the uvula; then gradually disappeared. The temperature was normal in three days.

About a week after entry the mother began also to notice that on attempting to swallow fluids she choked, while there was regurgitation at times through the nose. This condition has existed

during the past two or three weeks but has improved during the last week until now there is but little trouble in the swallowing. If you examine the mother's throat you will see that the velum on the left side hangs much lower and more flabbily than that upon the right; while the uvula is drawn distinctly toward the right. On attempting to speak or on tickling the palate you see how marked a reflex there is upon the right side, how the uvula is drawn in that direction. In other words, the mother has an unilateral paralysis of the soft palate. For the last two or three weeks the mother has had the same trouble with regurgitation but it was due to an unilateral lesion. The knee-jerks are almost absent.

Thus in these two cases we are dealing with conditions generally included under the term *post-diphtheritic paralysis*. In the first case there is complete paralysis of the muscles associated with the velum and uvula as well as a partial loss of power in the lower extremities with well-marked ataxic symptoms. In the second case we have to do with an unilateral paralysis of the velum and uvula.

You are probably familiar with the frequency of post-diphtheritic paralyses. They are, as you know, the commonest and at times the most serious sequels of diphtheria. Statistics, as will be mentioned later, show that they occur probably in over 10 per cent. of all cases. As a rule, they appear within the first three weeks.

By far the commonest form is that which we have here in the mother and in the child, namely, paralysis of the soft palate, resulting in the regurgitation of fluids and in the peculiar characteristic nasal voice. An unilateral paralysis such as is observed in the mother is not an infrequent occurrence. At times there may occur further paralyses of the pharyngeal muscles resulting in serious dysphagia.

But there are many other forms of paralysis which follow this disease; thus, various ocular paralyses are perhaps next in order of frequency to those of the palate. Disturbance of accommo-

dation from paralysis of the tensor chorioidea is particularly frequent. Next perhaps in frequency comes the ataxia and loss of power in the lower extremities.

In young children we see also at times paralysis of the muscles of the back of the neck, so that the head hangs flaccidly forward; paralysis of the abdominal muscles sometimes occurs.

At times there may be total paralysis of the extremities or of single cerebral nerves, oculo-motor, facial, abducens.

Henoch has twice seen paralytic aphonia, while paralyzes of the respiratory muscles may occur.

Disturbances of sensibility are most unusual. The sphincters are affected only in the later stages of fatal cases. In almost every case, however, where symptoms of post-diphtheritic paralysis are manifest there is a loss of the knee-jerk; this is true in many instances where no other signs of post-diphtheritic nervous disturbance are present. The great majority, if not all, of these disturbances, are now generally recognized to be due to a toxic neuritis of the peripheral neurone.

Other changes, however, may follow in the nervous system after diphtheria, hemorrhages or degenerative changes in the brain or spinal cord.

Schoenfeld has noted two cases of multiple sclerosis following diphtheria.

Again, a number of instances of hemiplegia have been reported. Thomas of Boston has collected 30. These have doubtless been due to different causes; embolism, thrombosis or hemorrhage. They are probably similar in nature to those which are observed after many other infectious diseases, in particular in typhoid fever.

Many observers have described capillary hemorrhages in the brain and in the cord as well as in the heart muscle and in other organs.

Among the post-diphtheritic paralyzes are often included those instances of sudden cardiac failure which may, as is well-known, occur late as an apparently normal convalescence. It is a question whether these cases of cardiac paralysis depends chiefly upon changes in the

heart nerves, or upon the affection of the heart muscle itself.

The frequency with which post-diphtheritic paralyzes occur is difficult to determine. Different epidemics show the greatest variations in the frequency of post-diphtheritic nervous manifestations. Thus, Unterholzer in Vienna asserts that after some epidemics he has seen the percentage of post-diphtheritic paralyzes as low as 4 per cent. and in others as high as 17 per cent.

Hoppe-Seyler in Kiel found post-diphtheritic paralyzes in 27 per cent. of his cases, while Johannes, in Norway, estimated the average occurrence of post-diphtheritic paralyzes at 12.5 per cent., although in severe epidemics he has seen the percentage as high as 50. Duckworth estimates the percentage at from 10 to 20 per cent. Lennox Browne out of 1000 cases found post-diphtheritic paralyzes in 14 per cent., while Sanné out of 2448 cases found 11 per cent. of post-diphtheritic paralyzes. Combining Brown's and Sanné's statistics we find that out of 3448 cases, post-diphtheritic paralyzes occurred in 11.8 per cent.

What influence does treatment by antitoxine have upon the frequency of these manifestations?

In the recent discussions which have taken place upon the value of the antitoxine treatment, numerous statements are to be found with regard to this point. *A priori*, one might expect to find a reduction in the number of cases of post-diphtheritic paralyzes in those treated early by antitoxine. For certainly the shorter the time during which the circulating poison is allowed to act upon the tissues of the body, the less severe might we expect the result to be.

As a matter of fact a number of observers, while not offering any definite statistics, state their impression that the frequency of post-diphtheritic paralyzes is somewhat *greater* after use of antitoxine. Thus, Baginsky in his large clinic has seen, he believes, more post-diphtheritic paralyzes since he began the use of the antitoxine, while he quotes Hirschberg as saying that he has seen more ocular paralysis than ever before.

Von Noorden noted 21 instances of post-diphtheritic paralyses out of 81 cases, an enormous percentage, while Kohts and Steegenberg report that they have met with no great change in the frequency of this manifestation. On the other hand, many of the other statistics show a surprisingly small number of cases of post-diphtheritic palsy.

The most valuable report which is available is probably that of the American Pediatric Society, where out of 3384 carefully observed cases, there occurred 328 instances of post-diphtheritic paralysis, or 9.7 per cent. These figures, as will be seen, are a little below the estimates of the frequency of these manifestations based upon the combined statistics of Brown and Sanné of cases untreated by antitoxine. If we add to these cases the statistics of Seitz, Hubler, v. Noorden, Sonnenberg, Steegenberg, Gerloczy, Havas and Weber, we have in 3982 cases, 382 instances of post-diphtheritic paralyses, or 9.5 per cent. The evidence, then, based upon a very considerable number of cases is rather in favor of a slight diminution in the frequency of post-diphtheritic paralyses in cases where the antitoxine has been used. The significance of these figures becomes rather more striking when we remember the fact that from 5 to 20 per cent. more patients survive under this treatment. It is easy to conceive that many of the instances of diphtheria which result fatally might, if the life were saved, develop nervous disturbances afterwards. The more intense, indeed, the poison, the more frequently might we reasonably expect to meet with grave results. Granting that in any one given case the administration of antitoxine, by cutting short the period during which the tissues are exposed to a circulating toxic substance may diminish the likelihood of peripheral neuritis, yet the addition of 10 to 20 cases in every hundred to the number which would have survived without the administration of antitoxine—cases which during a certain length of time have been exposed to a most intense poisoning—might well result in an equal or even greater number of post-diphtheritic paralyses than were ob-

served in the cases treated according to the old method.

If in spite of this fact the number of cases of post-diphtheritic paralysis in every hundred is no greater, or indeed really less than previously, as seems to be the case, then we may well assume that the early administration of antitoxine has exerted a distinctly favorable influence in protecting the nervous system.

A striking feature, however, of the antitoxine report of the American Pediatric Society is the large number of late sudden deaths from cardiac paralysis; thus, 32, or nearly 10 per cent., of the cases of post-diphtheritic paralyses were instances of sudden death. Only three of these occurred, however, in instances where the inoculations were made in the first two days. Two-thirds of the cases occurred in patients where the injection had been made after the third day. As is stated in the report, many of these instances would probably have proven fatal earlier in their course had the serum treatment been omitted. The antitoxine cannot be reasonably expected to overcome the damage done by toxins before it was injected.

The prognosis in these cases of post-diphtheritic paralysis is usually good if we leave out those distressing instances of sudden death due to cardiac paralyses. It may well be that more of these instances than we suspect are really dependent rather upon changes in the heart muscle itself. The simple paralyses of the soft palate are usually relatively innocuous, and convalescence is to be looked forward to without treatment. In some instances, however, particularly if there be associated paralysis of the pharyngeal muscles, there is a certain danger of pneumonia from the inhalation of foreign particles, while strangulation from the lodging of large particles in the gullet or the larynx has occurred. The paralyses of the muscles of the trunk and extremities are often of annoyingly long duration, but almost invariably end in recovery.

With regard to treatment different observers give different advice. Thus, some are urgent in their recommenda-

tion of electrical treatment, while others, and among these Henoch, are inclined to rely more upon general tonic treatment with thorough massage and passive motion.

November 1, 1896.—You will, I think, all recognize the child I bring before you today as the same which you saw two weeks ago. At that time, if you remember, he was suffering from a post-diphtheritic paralysis of the velum and uvula as well as from a paresis of both legs with well-marked ataxia. The mother brought the child back to the hospital two days ago, complaining that it had grown much weaker, that it had not only continued to regurgitate fluids through the nose but had had great difficulty in swallowing solids, any solid particles sticking apparently in the gullet and causing attacks of strangulation which greatly alarmed her. She also says the child has become "cross-eyed."

You will observe as you look at the boy now, the manner in which his head falls first to one side, then to the other; now forwards, and, if he suddenly lifts his head up, it often topples over backwards. There is then apparently a great weakness of the muscles of the neck as a whole. You will notice also that the child has a well-marked convergent strabismus. On as careful examination as is possible with so small a child this appears to be due to a bilateral paresis of the external rectus; it is somewhat more marked on the right than on the left. You still notice the markedly nasal voice and as the boy walks you will see that he is still very unsteady and ataxic. There is, however, one feature which was not evident two weeks

ago; the child stands with an extremely marked lordosis; the abdomen is prominent, the back is arched forward in the lumbar region, while the shoulders are thrown back in order to keep the equilibrium. The attitude of the child is just that of a patient with a progressive hypothy. When the child is placed upon the floor he is, as you see, quite unable to get up again. You perhaps observed a few minutes ago as he entered the room how when he walked across to the blackboard and raised up his hands to seize the shelf upon which the chalk lies, his back suddenly gave way, leaving him hanging by his hands, his abdomen having as it were "caved in" against the wall.

This case, then, is an instance of rather remarkably generalized post-diphtheritic paralysis. The child has had, first, paralysis of the velum and the uvula; second, probably slight pharyngeal paralysis; third, double paralysis of the external recti; and fourth, a general weakness of the muscles of the trunk and of the legs with well-marked ataxia. The heart remains in apparently good condition.

The child is to reënter the hospital today, where it will be kept quiet, placed upon a full diet and cod liver oil and given regular daily massage with passive motions.

December 23.—The child is still in the hospital, but has improved in every way. He no longer regurgitates fluids and has no trouble in swallowing. The ataxia, though still present, is much diminished; the power of the muscles of the trunk and legs has greatly improved and the strabismus has nearly gone.

TEMPORARY PARALYSIS FOLLOWING GASTRIC DISTURBANCE.

ROUX has had occasion to observe (*British Medical Journal*) a case of paralytic symptoms appearing suddenly in the course of an attack of gastric disturbance. The patient, who had been suffering from dyspeptic symptoms of a mild degree for about a week, suddenly suffered from general weakness, fever, and lumbar pain, which in the course of some hours resulted in complete paralysis of the fore limbs, diminution of

the knee-jerk and of sensation of pain, the sphincters being unaffected. This condition lasted a week, disappearing as rapidly as it came on and without leaving any trace. The author, without committing himself to any diagnosis, draws attention to the analogy presented by this case with acute spinal paralysis.

The case, however, seems to differ in some respects from ordinary cases of this disease, more particularly in the fact of the pain sensation being altered.

Medical Progress.

HEMATOMA OF THE DURA MATER.—A very interesting but somewhat mysterious case is published by Dr. Munro in a recent number of the *Lancet*. The patient was a cooper about fifty years of age, who was admitted to the wards of the Victoria Infirmary in January, 1895. He had been in his ordinary health a few hours before when he suddenly fell down in general convulsions. The seizures followed each other very rapidly, but after a time it was noticed that the convulsion became almost restricted to the right side, although the left leg was still slightly involved. Consciousness was not regained, and on admission it was observed that the mouth drooped to the right. Each fit commenced with conjugate deviation of the eyes and head to the right side, and then tonic, followed by clonic, spasm affected both legs and the right arm. No cardiac lesion was detected and the urine was not examined. The temperature rose to 106.8° F. before death ensued.

The condition of the brain found at the necropsy is of much interest. No significant abnormality was found in any other organ. When the dura mater was removed it was found to be lined on the left side by an adventitious membrane about as thick as itself, firm and adherent, although it could be stripped off. It was reddish in color and was not adherent to the pia-arachnoid except in the region of the left olfactory bulb. There were no evidences of hemorrhage to the naked eye, and the membrane appeared to be of recent development. It clothed the inner surface of the dura mater, above, below, and laterally. It was, however, absent from the left side of the falx and from the superior surface of the tentorium. Microscopic sections showed it to be much less transparent than the dura mater. It consisted of several layers and its deeper half contained more pigment than the half next the dura mater. The pigment was reddish-yellow and was distributed in round or oval clumps of considerable size within cells. The basis of the membrane was a vascular and cellular fibrous tissue. The dura

mater was not abnormally adherent to the bone on the left side. No other intracranial abnormality was discovered.

Dr. Munro, in discussing this case, directs especial attention to the occurrence of what was apparently a hematoma of the dura mater in a patient not an inmate of an asylum. It is undoubtedly rare, and that this false membrane was the result of repeated hemorrhages is probably indicated by the fact that it could be easily separated from the dura mater and by the presence of pigment almost certainly derived from the blood, in the membrane. Such a condition has been described in connection with general paralysis of the insane. It has also occurred in infantile scurvy, but we are not aware of any other condition with which it is associated unless we include a similar if not identical condition in syphilis. There was apparently no recent change in the condition which would account for the status epilepticus leading to the fatal issue.

* * *

"MIRROR SPEECH."—Mirror writing, whether as a pathological symptom or when practiced for the purpose of rendering written communications illegible in the ordinary way, is a well-known abnormality, but it has been reserved for Dr. Doyen of Paris to discover the first case of "mirror speech." A little girl twelve years old, says the *Lancet*, had been trepanned successfully for a cerebral abscess the result of otitis, but for some time after the operation aphasia remained persistent. Then by degrees, as the patient's general health improved, she began to utter sounds which although distinctly articulate were nevertheless totally incomprehensible; such, for example, as "te-tan-ma; yen-do sier-mon, chant-mé; le-quil-tran-ser-laisme-vous-lez-vou."

The young girl seemed to be quite unaware of her curious incoherency, and the inability of her friends and attendants to understand what she wanted consequently made her very angry. She evidently attributed their amazing lack of comprehension to stupidity and sought to stimulate their intelligence by repeating over and over again a number

of apparently unconnected syllables, similar to the foregoing, with an ever-increasing volubility. At last one of the bystanders suggested that what she was saying should be taken down in writing; and no sooner was his idea carried out than at once the key to the enigma became manifest. The child was simply speaking her sentences backwards, beginning at the last syllable to end with the first, and that without the slightest mistake even in a combination of a dozen or more words. The example given above will be found, when transposed, to resolve itself into the following elementary sentences. *Ma tante; Monsieur Doyen, méchant; voulez-vous me laisser tranquille.*"

This remarkable aberration of speech continued during five weeks, when the recalcitrant syllables began once more to fall into their proper places. Since then several months have passed without any signs of a relapse, and when last seen the little patient was in a flourishing state of health with perfect articulation.

* * *

THE TREATMENT OF THE SYPHILODERM.—In a clinical lecture delivered at the New York School of Clinical Medicine, Dr. William S. Gottheil said that a careful consideration and trial of the various methods of treating the syphilodermata has led him to the following conclusion:

1. In the primary stage, when only the chancre is present, no general treatment; calomel locally.

2. As soon as the secondary period sets in, as shown by the general adenopathy, angina, cephalalgia and eruption, the internal treatment for mild cases should be one-quarter to three-quarters of a grain of the proto-iodide of mercury t. d., continued for three months, or until the symptoms disappear. In severer cases, with pustular eruptions, severe anginas, persistent headaches, etc., a course of six to ten intra-muscular injections of ten per cent. calomel-alboline suspension, five to ten minims at intervals of five to fifteen days, should be employed.

3. After completion of the course and cessation of the symptoms, employ

tonics, etc., without specific treatment, for three months.

4. Thereupon a second calomel course as above, plus a small dose (fifteen grains) of iodide of potassium in milk after meals. This to be given whether later secondary symptoms of the skin and mucosae appear or not.

5. Second intermission of treatment, lasting three to six months, according to the presence or absence of symptoms.

6. In the second year, if tertiary lesions marked by deeper and more localized ulceration are present, give the iodide of potassium in increasing doses (sixty to six hundred grains daily, as may be necessary). Combine with it occasional courses of calomel injections. If no lesions appear, give a mild course of both.

The best local treatment of the syphilodermata is with the mercurial plaster-mull.

* * *

THE ULTIMATE RESULTS IN EIGHTY-SIX CASES OF FIBROIDS OF THE UTERUS TREATED BY THE APOSTOLI METHOD.—Dr. G. Betton Massey reported eighty-six consecutive cases of uterine fibroids treated by the Apostoli method to the American Electro-Therapeutic Association at its annual meeting in Boston, September 28, 1896. After considerable correspondence and inquiry the ultimate results (or those existing from two to eight years after cessation of treatment) were ascertained in seventy-five cases, and were found to be as follows:

Anatomical and symptomatic cure: destroyed piecemeal by electrolysis through cervix, 1; extruded through cervix in whole or part, 4; disappeared under absorption, 12.

Symptomatic cure: with great reduction in size, 16; with slight reduction in size, 21; without change in size, 10.

Total cases resulting in practical success, 64; symptomatic improvement only, 4; failure to effect any change, 6; made worse, 1.

Total cases resulting in failure to relieve, 11.

The sixty-four successful cases give a percentage of 85.33 per cent. of successes, and the eleven cases of slight

improvement and no improvement and the one made worse, give a percentage of 14.66 per cent. of failures.

The one case that was made worse was a cystic intra-uterine growth that was improperly treated by electricity before it was generally known that such cases should not be treated by the classical Apostoli method. Future statistics will naturally be clear of such errors of practice, hence it may be said that the practical ultimate results in a hundred cases properly treated by electricity will be at least eighty-five cases successfully and satisfactorily handled, and fifteen cases in which electricity will do no good nor yet any harm, leaving that number of tumors unchanged for other methods promising great relief.

Of the twelve tumors reported as having disappeared by absorption this fact was verified by the reader of the paper in but seven instances, the remainder being reported by the patients themselves.

* * *

HOT ROOMS AND CATCHING COLD.—

We are so accustomed to the formula that American houses are always overheated, says the *Medical Record*, and it has become so much the fashion among medical men to attribute catarrhal troubles to this cause, that it is interesting to learn of an English writer who thinks it is better to be warm than cold in winter. Dr. William H. Pearse, writing in the *Scalpel* for September, says that he ventures to differ from the popular belief, that there is special danger in going from a hot room into the open air, holding, on the contrary, that the heat of the room or house is a great preservative from chill or "catching cold" on going out into the open air. In Russia, in Central Europe, Canada and the Northern United States, houses are made very warm with a dry heat in the winter, yet men, women and children go out into a temperature below zero. The stimulation and heightened condition of the circulation and nerves, and ultimate molecules of protoplasm, give a great power of resistance to the outer intense cold, preventing "chill" in the first exposure until exercise with

its infinite motions, as it were, takes up and maintains the conditions of resistance. Dr. Pearse says that he has walked at midnight from a highly heated mansion across Boston Common, in his dress coat only, on a calm, starry night, the temperature about zero. He suffered no inconvenience, and felt sure that the stimulus of the heat of the house gave him power of resistance to the cold.

Dr. Pearse is undoubtedly correct in his observation that one can come from a hot room into the cold outer air and run but little chance of catching cold. The danger is rather in entering a hot room from without, and especially in entering an overheated and unventilated apartment filled with excrementitious products from the lungs and skin of its inmates. A change from a hot to a cold atmosphere can be made suddenly, but that from extreme cold to indoor heat should be made gradually if one would avoid the catarrhal consequences of "catching heat."

* * *

TREATMENT OF WARTY GROWTHS OF THE GENITALS.—William S. Gottheil, in a paper on epithelioma of the penis read before the Society for Medical Progress, November 14, 1896, concludes as follows (*International Journal of Surgery*, January, 1897):

1. Warty growths of the genitals, more especially in the male, are always to be suspected of malignancy, no matter how innocent they seem.

2. They should either be left entirely alone, or be thoroughly removed by knife or cautery.

3. Imperfect attempts at destruction, as with nitrate of silver, carbolic acid, etc., are especially to be avoided; there being many cases recorded in which they have apparently stimulated a benign growth into malignant action.

* * *

CONTAGIOUS IMPETIGO.—(William S. Gottheil, M. D., *Pediatrics*, October, 1896): This is a self-limited contagious disease of children appearing in localized epidemics and first described by Tilbury Fox in 1864. Accompanied by a moderate fever and some gastric disturbance

there appear on the face and hands groups of flat vesicles filled with transparent or cloudy serum. These dry up into characteristic golden-yellow crusts, which fall off in two or three weeks, leaving circular, reddened, non-ulcerated areas behind. Successive crops of vesicles may prolong the disease for two months or more. It is undoubtedly parasitic; but, though Kaposi claims to have found it, the etiologic factor is still unknown. The treatment consists in removal of the crusts with olive oil compresses, cleansing the skin with hot water and soap, boric acid solution, etc., followed by the use of Lassar's paste:

R.—Acid. salicylic 30 grains.
 Petrolati 1 ounce.
 Zinci oxidi
 Amyli āā. ½ ounce.

* *

A STATISTICAL STUDY OF EPIDEMIC MEASLES.—As a result of a careful study of epidemic measles, with especial consideration of the epidemic observed at Munich in the year 1887, Möller (*Medical Record*) formulates the following conclusions: There is no such periodicity of epidemics of measles, with constant intervals, as to justify the acceptance of a law of periodicity. The occurrence of an epidemic of measles requires the introduction of the contagium and the presence of a number of persons not previously affected with the disease. Besides, the epidemic occurrence of measles depends upon the coincidence of yet unexplained accessory causes varying with the season of the year. Whether or not the warmer period of the year, directly through the higher temperature, or indirectly through attenuation of the contagium in consequence of freer ventilation of living rooms, exerts a favorable modifying influence upon the morbidity of measles has not yet been determined. The mortality of measles in Munich has reached two maxima during the year for a period of twenty years, a smaller in December and a higher in May and June. The mortality of measles in Munich during the first and more especially during the second half of the decennium from 1880 to 1890, while al-

most treble the average for the preceding decennium, declined considerably in the succeeding years. No period of life possesses entire immunity from infection with measles, although the predisposition is less in infancy. Almost the total mortality in Munich is confined to the last five years of life; the first and second years present approximately the same absolute mortality. The relative mortality in Munich is for the first year fifty-five times, for the period from the second to the fifth year twelve times as high as that after the age of five years. Although in consequence of the shortening of the interval between epidemics the average age of morbidity has fallen, a lowering of the average age of mortality has not taken place in Munich. Both sexes suffered alike in Munich in regard to the morbidity of measles. The absolute as well as the relative mortality in Munich displayed considerable differences in different parts of the city.

* *

ATRESIA AND ITS CAUSES.—Meyer (*British Medical Journal*) has published a very complete monograph on this subject, with no fewer than 216 cases carefully tabulated. He does not confirm Kussmaul's doctrine that ill-development of the lower part of the genital tract with atresia is due to fetal inflammation. It is in infancy and childhood that these inflammations occur, such as vulvitis and local lesions in general infectious disorders. The vagina closes, the tissues heal and look healthy after a time, and it is not till puberty that the damage becomes manifest. Then it is easy to understand how the disease might be wrongly considered congenital. Unilateral hematosalpinx, with inflammatory closure of the vagina, is very often observed, and Meyer holds that there is closure of the tube at the ostium from the same inflammation, due to some infective agent. As the agent can cause septic changes in the blood in the tube, the ultimate rupture of the hematosalpinx into the peritoneum or into some visceral cavity puts the patient to great peril. This explains the high mortality of atresia vaginae with unilateral hematosalpinx.

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THERE is no class of patients presenting a more hopeless prognosis in general family practice than the confirmed epileptic.

Treatment of Epileptics. Even in the "epileptic home" it is difficult to enforce that dietary and moral control which must be the basis of all treatment in the majority of cases. This statement is made, of course, with the understanding that confirmed epilepsy has been distinguished from single epileptoid attacks, alcoholic, "uremic," and hysterical convulsions, a discrimination by no means simple.

It is always interesting to learn what experience is teaching in the special hospitals concerning the therapeutics of this disease, and therefore a glance at the report of Dr. Flood upon the results obtained in the Hospital Cottages for Children at Baldwinville, Mass. He says (*Atlantic Medical Weekly*, October 24) that in ten years past 150 cases have come under his care in which a sufficient

period after his close observation has elapsed, mostly three years, to test the value of his statistics. (In this precaution he shows a rare judicial spirit.)

The reader should peruse the original report, which is full of thought. An attempt was first made, on admission to the hospital, to treat, by baths, diet, moral control, occupation, prolonged recumbency, careful mastication of food, lavage of stomach, attention to decayed teeth or defective vision, or throat and nose inflammations, without any drugs and in ten cases the spasms ceased under these measures. In most cases bromides of potash had eventually to be given. The other bromides (strontium was not used) and mixtures of them presented no superiority to the potash salt. Nickel bromide was disused on account of the vomiting it excited. Animal extracts, hydrocyanate of iron and solanum carolinense were useless. Antipyrine and the bromides, calabar bean and the bromides were of some value. Potassium iodide was very efficient at times, equal to the bromides. Continued saline purgation and tonics were frequently useful. Haig's methods gave results like those of other good plans. Twenty boys were castrated, with considerable advantage in morals and in moderation of the fits.

The patient who has taken bromides for years will, if he wholly stops the drug, be better for a few days, then symptoms of dementia occur. On forced feeding and stimulants he picks up. After three or four weeks he has a few more fits. Then he becomes as he was when formerly taking bromides and continues so if the case is favorable.

Altogether, 25 out of the 150 were cured of the epilepsy. Eleven of the twenty-five are now bright, healthy children. The remaining fourteen are more or less feeble in mind or morals.

SLIGHT chilliness or coldness of hands and feet is very frequent in children. It may be due to imperfect protection of the body by under clothing or outer clothing.

Rigors in Children. It may be a sign of some indigestion process, apart from exposure to cold. Fully developed rigors, on the contrary, as in the adult where the skin becomes anemic and wrinkled (goose-flesh), the teeth chatter and the tem-

perature shoots up, are very rare in children. This is so well-known that in suspected malarial attacks we do not look for the chill as an important diagnostic point.

With reference to rigors in "septic" infections, Dr. Baldwin (*Lancet*, June 13) presents some interesting statistics from the surgical wards of a great London child's hospital. In adults suffering from surgical troubles the onset of rigors is one of the alarm signals indicating that trouble is brewing. In abscesses and wounds they almost certainly indicate that the blood stream is becoming infected by septic matters from the ailing part.

In children, on the contrary, this danger signal is almost always wanting, and if present it may not indicate exactly the same complication as in adults. In septic abscesses, many of which were recorded, some with general pyemia, rigor was almost wholly absent. In fourteen cases of cellulitis, many of them presenting other plain septic symptoms, no rigors were noted. In three cases of empyema no rigors were mentioned. In twenty-one cases of acute epiphysitis, twelve of them fatal, nothing is said of any rigors having occurred.

The above records seem to have been kept with care, as shown by their fulness in regard to other details. It is also worthy of note that convulsions, which so often in children replace the ordinary danger signals (subjective) of the adult, did not with any frequency take the place of rigors in these cases.

The paper of Dr. Baldwin contains many other details of value concerning this diagnostic symptom, among others, records which show its unreliability (according to adult standards) in suppuration of the middle ear and mastoid with threatened lateral thrombosis.

* * *

Few persons like to have their idols shat-
tered and their fine dolls turn to sawdust.

Dr. Charles Harrington of the *Lithia Water*. Harvard Medical School, who some years ago showed the true value of the so-called diabetic bread and flour, now strikes a blow at the various lithia waters and goes on to show that lithia itself plays a very small part in the good effects or supposed good effects of this pleasant medication. Dr. Harrington states in the *Boston Medical and Surgical Journal* that he went

out into the open market and bought several varieties of lithia water as put up by firms whose wares are made well-known through broadcast advertising. These waters he carefully analyzed. It would hardly be necessary to go into the exact course of analysis which the author pursued, but suffice it to say that of three of the lithia waters, which are household words and used by physician and layman alike, he found in two absolutely no lithia at all, in the third such small quantity that the good effects of the water could hardly be traced to this salt. All three of the waters were clear, colorless and odorless, but two of them by reason of their excessive hardness were not to be recommended for general household use, and while the third was a good water for domestic use, none of them had any special medicinal value. These waters may not do what their owners claim, yet at the same time they are of great benefit because when a person is put on a course of water, whether by his physician or with the suggestion of a friend, there is usually accompanied with this prescription the injunction to eat sparingly, take no alcoholics and lead a regular life with plenty of sleep. Such a course with any kind of water would likely effect a cure in most cases.

Too many persons, as a rule, do not drink enough water to flush out the waste materials in the body and if the prescribing of supposed lithia water makes a man drink plenty of good, pure water and abstain from many things that are harmful then let what please have the credit but rejoice in the cure. Dr. Harrington's work carries with it a conviction that he is honest and not writing for spite or in favor of any person or persons. Many physicians in prescribing lithia water usually advise the addition of some salt of lithia to the water, but few persons would have believed that two of the best known lithia waters contained absolutely no lithia at all. Therefore, to pay twenty cents a bottle for what may be obtained for much less is a species of faith cure, but if Dr. Harrington's conclusions are correct the transaction is hardly to the credit of the wealthy spring owners.

* * *

EXCELLENT work is being done in the bacteriological laboratory of the Health Department of Baltimore under the direction of Dr. Wm. Royal Stokes.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 2, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		31
Phthisis Pulmonalis.....		26
Measles.....		
Whooping Cough.....	9	2
Pseudo-membranous Croup and Diphtheria. }	28	8
Mumps.....	3	
Scarlet fever.....	23	
Varioloid.....		
Varicella.....	7	
Typhoid fever.....	6	2

Dr. Bumm of Erlangen has been made professor of psychiatry at Munich.

There were 440 members in attendance on the Pan-American Medical Congress at Mexico.

The Louisiana State Board of Health examines gratuitously sputum for suspected tuberculosis.

The members of the dispensary staff of the College of Physicians and Surgeons held their annual banquet last week.

Behring of antitoxine fame has succumbed to that disease against which there is no known antidote—matrimony.

It is said that some American hotels, in imitation of foreign hostelryes, sell the "resident physician's privileges" to the highest bidder.

The New York Health Board has drawn up a modern death certificate and submitted it to a number of physicians for examination, criticism and suggestion.

It is proposed to found in Germany a German society of Pathologic Anatomy to meet once a year. The committee on organization consists of Virchow, von Recklinghausen, Ponfick, Ziegler, Prag and Hanan.

There is rarely a period when some unfortunate English physician is not suffering the pangs of a lawsuit, the costs of which are borne in part by kind colleagues. American physicians seem as a rule to keep out of such scrapes.

The Philadelphia Polyclinic School of Medicine did a very gracious act when it offered the New York Polyclinic, whose buildings were destroyed by fire recently, to honor all its students' tickets.

Dr. Ernest Wende has been reappointed health commissioner of Buffalo for four years and Dr. Walter D. Green deputy health commissioner.

Dr. E. M. Magruder of Charlottesville and Dr. Charles W. Rodgers of Fisherville succeed respectively Drs. J. Edward Chancellor and H. M. Patterson, lately deceased, on the Medical Examining Board of Virginia.

The following has been received from the Pasteur Monument Committee: "It has been decided to erect in one of the squares of Paris a monument to the memory of M. Pasteur. Statues or busts will also no doubt be located at his birthplace and in other cities. The Paris committee has, however, wisely determined that the statue obtained through international effort shall be located at Paris, where it will be seen by the greatest number of his admirers from other lands. The Paris committee has kindly extended the opportunity to the people of the United States to assist in this tribute of appreciation and love and have authorized the organization of the Pasteur Monument Committee of the United States. The members of this committee gladly accept the privilege of organizing the subscription, and of receiving and transmitting the funds which are raised. We believe it is unnecessary to urge any one to subscribe. The contributions of Pasteur to science and to the cause of humanity were extraordinary, and are so well-known and so thoroughly appreciated in America, that our people only need the opportunity in order to demonstrate their deep interest. No one is expected to subscribe an amount so large that it will detract in the least from the pleasure of giving. A large number of small subscriptions freely contributed and showing the popular appreciation of this eminent Frenchman is what we most desire. The amounts thus far subscribed by individuals vary from fifty cents to ten dollars. It is hoped that no one who is interested will hesitate to place his name upon the list because he cannot give the maximum amount. The MARYLAND MEDICAL JOURNAL will be pleased to receive subscriptions and forward them to the treasurer of the committee."

Book Reviews.

DIAGNOSTIC URINALYSIS. By M. D. Hoge, Jr., M. D., Professor of Histology, Pathology and Urinology, University College of Medicine, Richmond, etc. George M. West, Publisher, Richmond, Va. Price \$1.00 Pp. 87.

This excellent little manual is rather a record of the clinical significance of certain morbid conditions of the urine than a guide to urinary analysis. The author understands his subject and seems to have omitted little of importance. The lack of illustrations is unfortunate as they are of immense importance in this subject. The book is reprinted from the *Virginia Medical Semi-Monthly*, in which the series of articles appeared in the past year. The word "urinalysis" has no philological basis and is not a good one. The worker in urinary analysis will find in this manual all the simplest tests clearly explained with the clinical significance.

PROMAINES, LEUCOMAINES, TOXINES AND ANTITOXINES; or the Chemical Factors in the Causation of Disease. By Victor C. Vaughan, Ph. D., M. D., Professor of Hygiene and Physiological Chemistry, and Frederick G. Novy, M. D., Junior Professor of Hygiene and Physiological Chemistry in the University of Michigan. New (third) edition. In one 12mo volume of 603 pages. Cloth, \$3.00. Philadelphia: Lea Brothers & Co. 1896.

Previous editions of this book have been noticed in these columns before. In this the third edition, the authors have thoroughly revised the book and brought it down to the date of publication. The book opens with a historical sketch of the subject and then follows chapters on the various diseases and those on immunity. The work is an exhaustive one and is evidently the result of a prodigious amount of labor. The spelling on the title page and back of the book do not agree.

REPRINTS, ETC., RECEIVED.

Acute Suppurative Inflammation of the Middle Ear; Acute Suppurative Mastoiditis; Abscess of the Neck; Operation. By Seth S. Bishop, M. D., Chicago. Reprint from the *Laryngoscope*.

Adenoid Vegetation of the Vault of the Pharynx. By Seth S. Bishop, M. D., Chicago. Reprint from the *New Albany Medical Herald*.

Current Editorial Comment.

PURE WATER WANTED.

American Medico-Surgical Bulletin.

THE universal cry is now for a pure water supply. In all the large cities the public is making this demand, owing largely to the education of the public by the medical profession. The doctors are always curtailing their business, and nobody seems to appreciate it.

NIGHT EMERGENCY CALLS.

American Medico-Surgical Bulletin.

VIEWED as a matter of absolute legal right, no physician is obliged to give his time or services any more than a baker is obliged to give his bread to the city poor. But physicians have encouraged medical pauperism and cheapened the value of their services so systematically, in the matter of free clinical and dispensary practice, that they have themselves to thank for the result that the great mass of citizens, poor and well-to-do, habitually regard it as their right to demand medical aid at all times, without the faintest expectation of paying for it. Certainly there is a commercial basis to the practice of medicine. Physicians do not desire, and would not accept, the allowances, reductions and gifts which, for example, many clergymen expect and claim as their right. They do desire and deserve a *honorarium* proportionate to the means of the patient. For attending cases whose relief is properly a public expense they ought to receive some compensation out of the public treasury.

THE FOOLISH PHYSICIAN.

Medical News.

THE average doctor is servile and shortsighted to an extraordinary degree, bent not only upon his own destruction, but also upon endangering the entire fabric of a noble and benevolent profession. Even plumbers and members of other trade-unions protect themselves by curtailing apprenticeship and by keeping out ignorant cut-throats. Why shouldn't doctors? But it is too late! Even now as we near the vortex of muddy competition, and as we are about to go down for the last time, we must acknowledge a bitter justice in our fate; for years of neutrality and final servility have taught pompous laymen, who pose as public benefactors and philanthropists, that doctors will stand any amount of robbery and degradation to secure and keep a hospital or dispensary position.

Publishers' Department.**Convention Calendar.****BALTIMORE.**

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. W. S. GARDNER, M. D., President. J. M. HUNDLEY, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. W. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

LIFE OF SIR ASTLEY COOPER.—We have received from the Norwich Pharmacal Co., Norwich, N. Y., an entertaining and interesting brochure with the above title, written by the editor of the "Medical Muse." It is replete with anecdotes, more especially of his boyhood days, and will well repay a perusal, not only for the vivid descriptions of the manner and dress of a surgeon ninety years ago, but incidentally to the discovery by Cooper of the virtues of the healing properties of Alum, in which Unguentine, made by the Norwich Co., is a modification of his celebrated formula. It contains a portrait of Cooper painted by Sir Thomas Lawrence, president of the Royal Academy, the original of which hangs in Guy's Hospital, London, also the rare picture of Cooper's debut in surgery, and is intended as a New Year's present by the firm, who will send it to any physician on receipt of a postal card.

We take pleasure in acknowledging the receipt of a booklet entitled "The Relief of Pain," by Dr. William R. Hayden of Bedford Springs, Massachusetts. Its author is known to the medical profession throughout this country and abroad as the originator of "Hayden's Viburnum Compound" and the president of the New York Pharmaceutical Company, which manufactures this famous article. Dr. Hayden's "Anesthesia," in which he has so ably championed the claims of Dr. Morton as the real discoverer of painless surgery, has had universal distribution and has probably done more to disperse the doubt and confusion with which this great honor was so thickly beset than any other instrumentality. The illustrations which grace the pages of this hand-book for 1897 are from original drawings by leading Boston artists. "The Substitutor," "Anesthesia," "Alkozar, the Alchemist," "Death" and "Resurrection," are all noteworthy productions. It is but fair to say that the substantial returns which have come to the author of Hayden's Viburnum Compound is a just recognition of the intrinsic value of this antispasmodic, which has been before the profession for the past thirty years and carries the written endorsements of over seven thousand physicians. The public-spiritedness of Dr. Hayden has been manifested throughout his long career and he has been preserved in health to enjoy the fruits of his genius. Many physicians recall with pleasure the hospitality experienced at "Lakeside," Bedford Springs, where the Doctor's public efforts are best known and where he has filled all the principal offices to the benefit of the public weal, and for the past year has been a member of the Massachusetts Legislature. The medical profession delights thus to honor one whose life has been truly a benefaction.

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Original Articles.

THE ETIOLOGY OF INFANTILE CONVULSIONS.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND, NOVEMBER 6, 1896.

By Frank Dyer Sanger, M. D.,

Physician in Charge Nursery and Child's Hospital, Baltimore; Demonstrator of Anatomy and Associate Professor of Diseases of Children, College of Physicians and Surgeons, Baltimore.

ALL writers upon the subject, and all statistics bearing upon convulsions in early life, point to one etiological factor of special prominence, and one it seems to me of peculiar significance. The fact that convulsions are much more frequent during the period of infancy, more than twice as many as shown by Lewis' tables occurring during the first year of life, as occurring during the entire twenty years succeeding.

Jamison's tables indicate that there are two periods of frequency, viz. : The first month of life, and the period from six months to two years. Nearly all observers agree that the majority of convulsions occurring under one month of age occur soon after delivery and are the result of accidents incident to labor, or to congenital deformities. They are here a concomitant of death when post-mortem investigation will prove them to be symptomatic. In case death does not occur, the appearance later of spastic paralysis, or other manifestations, points back to a lesion, usually a meningeal hemorrhage, and places these cases as well on the list of symptomatic convulsions.

A large per cent. of convulsions occurring after the first month—I might say after ten days—are not due to

organic lesions, and it is to these that I wish to direct attention. The question which arises naturally is, why are convulsions more frequent under two years of age?

We have been accustomed to explain the fact on the ground of peculiarities in the nervous system at this period of life, nearly all existing theories being based upon or taking cognizance of peculiar instability of the nervous tissues, either in the direction of greater reflex excitability of centers or an undeveloped control of higher cerebral mechanism. But while it is generally conceded that instability of the nervous tissues plays an important part in the production of convulsions the instability of other tissues and organs, which is also peculiar to the period of infancy, seems hardly to have been considered.

What the nature of the nerve reaction is, which results in a convulsion, seems yet in doubt. There is even uncertainty in the minds of some as to the location of the cells concerned in this nerve reaction, Nothnagel's view of a "convulsive center" in the floor of the fourth ventricle being quoted and re-quoted from article to article by the various writers upon the subject.

It would seem, since a spasm is but a form of motion, and since motion is

the reaction of a motor cell, that motor cells anywhere might be concerned in a convulsion and that the same laws determining localization of motor centers apply, whether the nerve reaction observed be an ordinary muscular contraction or a spasm. It is difficult to understand the philosophy of a convulsion center in the fourth ventricle floor.

The recent investigations upon the nervous system, startling as have been their revelations regarding the histogenesis of the nerve cell, and deeply as they have penetrated the labyrinthine paths of the brain, have not, so far as I am aware, thrown any light whatever upon the nature of the nerve reaction in a convulsion. But investigations along other lines have pointed out certain conditions which will produce this nerve reaction. We can even go further and say that we know the antecedence of these conditions.

It is pertinent, therefore, that we should, while accepting the part played by an unstable nervous system (which instability be it said is founded on anatomical and physiological fact) leave this part of the subject and examine the conditions which, acting upon more stable nerve centers in the adult, are known to produce the nerve reaction which results in spasm, with the view of determining whether the same or similar conditions are not a concomitant of young life, dependent perhaps upon instability of tissues and organs, having an anatomical and physiological foundation, and being jointly responsible with the nervous system for the convulsive seizure.

We know that the organism in health, as well as in disease, is a recipient of and a generator of poisons; that certain mineral poisons, for instance, are continually introduced into the economy with the food; that substances useful to the economy, if they accumulate, or even if they become markedly deficient, are harmful. As for example, a marked variation in so simple a substance as water by perverting osmosis, impoverishing cells by the excessive abstraction of dialyzable material, or choking them by its accumulation, and thus

altering their entire chemistry, brings about dire results. We know that the secretions of the body are toxic, having a toxicity beyond the ferments which they contain — saliva for example; that in the process of digestion, as a by-product of the transformation of albuminous substances into peptones, alkaloidal poisons are produced; that in the alimentary tract as a result of decomposition which may arise from the organisms habitually there, as well as from infection with organisms from without, toxic material is produced.

We are aware that fortunately a large proportion of the poisonous material produced in the alimentary tract is eliminated with the stools. A certain amount is, however, absorbed and would constitute a menace to the economy were it not for the power of the liver to destroy or neutralize the poisons and pour them back into the intestinal tube.

Those poisons resulting from cell changes in tissues outside the intestinal tube find their way into the blood stream, and it would seem from the researches of Hoffmeister that the white globules play an important part in the neutralization or transformation of these.

While the greater amount of poison generated in the intestinal tube is eliminated with the stools, and while much that is taken up by the portal system is rendered harmless by the liver, Heeger, Shiff and Roger in Bouchard's laboratory have shown that the liver does not destroy all the toxic material coming to it by the portal vein. The blood stream, therefore, is the recipient of all the poison elaborated in the tissues and that from the intestinal tube not cared for by the liver. We have said that the blood itself may contain elements acting upon poisons in it, viz.: Hoffmeister's white globules. But the safety of the organism depends upon the integrity of the swift carrier which conveys these poisons to their proper emunctories, namely, the skin, lungs and kidneys, and upon the functional activity of these organs.

The importance of the carrying power of the blood is illustrated by the accidents following severe hemorrhage.

Brown-Séguard, I think, rightly considers the convulsions produced by hemorrhage to be identical to those caused by asphyxia and due to the retention of carbonic acid, one of the chief among toxins and one for which the nervous tissues are least tolerant. It should be noted that Kirk and others believe convulsions in this condition are due to lack of oxygen rather than excess of carbon dioxide.

All this is a matter of well-known physiology. Let us now ignore for the time being the skin and lungs as eliminating organs and turn our attention to the kidney and the urinary secretions.

We are dependent almost wholly upon the researches of Bouchard, who has shown what substances in the complex urinary secretion are toxic, though the toxicity of urine as a whole has been known since the experiments of MM. Feltz and Ritter in 1880.

Bouchard by separating the constituents of urine has disassociated its various poisons and shown that it contains at least seven toxic substances, viz. :

I. A diuretic substance which he has shown to be urea, the toxicity of which is much lower than certain of the other constituents, hardly equal to the most inoffensive salt. Hence in the complexity of symptoms thought by Wilson to be due to the retention of urea, and epitomized under the term uremia, urea is one of the least important poisonous factors. In fact it would seem that the danger lay in a deficiency rather than an excess of this substance, since it is the urea which is capable of forcing the kidney barrier and thus carries away other greater poisons.

II. A narcotic substance the nature of which is unknown, though it is supposed to be organic.

III. A sialogenous substance also unknown and also probably organic.

IV. A convulsive substance, probably organic, possibly an alkaloid. It is present in less quantity in the day urine than in that which is secreted at night. It is extremely rapid in its effect.

V. A substance contracting the pupil, fixed, organic, not in all probability

mixed with the preceding, for all normal urines contract the pupil, but very few induce convulsions.

VI. A substance which reduces heat by reducing heat production. It is also organic, perhaps a coloring substance. It is individual.

VII. Another convulsive substance, inorganic, which has been shown to be potassium.

The clinical picture of uremia as it is seen in adult life is not then painted by the one ingredient urea, but by a number, and the variations in the picture depend upon the variable admixture of these elements which in time results from variations in their production in these neutralizations, as well as their elimination. Furthermore, it seems probable that they may have a mutually neutralizing effect. In other words, that urine contains physiological antidotes to certain of its poisons. As for instance the narcotic poison antagonizing the convulsive poison and *vice versa*.

Since the various phenomena observed in uremia are the result of the retention in the economy of the various poisons normally gotten rid of through the kidney, and since these phenomena are observed individually, collectively or in variable combination dependent upon the poison which is predominant, it is necessary in order that one or more of these accidents making up the clinical picture of uremia should occur, that either there shall be an over-product of one or more poisons beyond the capacity of the destructive or elimination mechanisms, or else a deficiency on the part of these mechanisms. Nor is it necessary for the kidney to be diseased. It is quite sufficient that the toxic material in the blood at a given time should exceed the activity of this emunctory.

This is unstable equilibrium. Are there any conditions in young life tending to produce it?

The period of life from birth up to the end of the second year is characterized by a struggle for the establishment of equilibrium. The various tissues and organs are still in a developmental state. There are striking peculiarities, anatomical and physiological, for instance, in

the whole digestive tract, which are being adjusted.

Let us consider some of these. The salivary secretion requires some time for its establishment and its active principle ptyaline does not appear until the third or fourth month.

Traube and Escherich have shown that the stomach is less important than the intestine in digestive processes. From an organ containing about one ounce in capacity, it quadruples in four months. The pepsin and hydrochloric acid are present in its secretion; little digestion is accomplished here except coagulation of milk. There is little absorption, and since its secretion is but feebly antiseptic, it is an ideal place for the development of bacteria. Hoffmeister and Tappin have shown that the stomach does not absorb soluble material as readily as the intestines.

Korowin has shown that the diastatic ferment in pancreatic secretion is not present, except in traces at the end of the third month; and is not in full power until the end of the first year.

Zweifel shows that the proteolytic action of pancreatic juice is relatively active in young infants. Absorption of fat is ready because of the well developed glandular tissue in the intestine.

Dastrex has shown that milk sugar is digested by a living ferment in the small intestines.

Bencke's work on the alimentary tract at different periods of life shows that the length of the tract compared to the length of the individual is relatively greater in children.

In new-borns, 570 to 100; at two months, 660 to 100; at seven months, 510 to 100; at thirteen months, 470 to 100.

The liver is relatively large. Its size is in harmony with great nutritive and metabolic activity of this period, but its growth is relatively smaller than that of the child. The heart is relatively large.

In infancy the volume of the heart is to the size of the aorta as 25 to 20; at puberty as 140 to 56; and after puberty, as 290 to 61. (See article on Anatomy of Children, Cyclopaedia of Diseases of Children, first volume.)

The post-fetal growth in arteries is smallest in the carotids, largest in the femoral and renals. The renals grow more rapidly than the kidney itself and the kidney is less permeable in the child. These facts probably account for the frequency of kidney diseases in young life.

The quantity of blood is less in the child in proportion to the body weight, being one-nineteenth in the child, and one-thirteenth in the adult.

Adjustment is the order of the day and presupposes instability.

The fact that the infant is not so well protected against the invasion of micro-organisms and the fact that exposure to infection is much more frequent accounts for the commonness of infectious processes, which in turn play an important part in auto-intoxication.

It seems, therefore, extremely probable that convulsions in early life may be in many instances manifestations of auto-intoxication; that there are two primal conditions underlying:

I. Instability of nervous tissue, which predisposes to convulsion reaction.

II. Instability of metabolism generally, which may lead to an excess of poisonous materials in the blood, which acting upon predisposed nerve tissues, gives the convulsive more reaction. The question very naturally arises: If instability of metabolism produces the convulsive accident, why are not the other toxic results observed? It is not sufficient to say that the nervous tissues are perhaps less disposed to the nerve reactions which result in narcosis or diuresis, etc., than to the convulsive reaction.

Let us answer those questions by asking a few.

Who has not observed the great variation in the quantity of urinary secretion, particularly in strumous, lithemic children?

Is the variation in salivary secretion apparent rather than real, observed because the child has not learned to keep the mouth shut; and is the flow which seems excessive at times due to the reflex irritation from the gums?

Is contraction of the pupil common? I have not observed it to be so, but may

it not go unobserved a hundred times—yes, would it not be a thousand times more apt to go unobserved than a convulsion?

It is hardly necessary to ask who has not observed narcosis. I go into a play room where twenty children are holding high pandemonium, and find a child asleep on the floor. He is stupid, his tongue coated and breath offensive; he may or may not have temperature; we put him to bed and give him a brisk cathartic; in a few hours he has joined the riotous assemblage of his companions and is as lively as any of them. He who has not seen a child stupid from simple indigestion may at least have felt dull himself from constipation.

Is sub-normal temperature a unique thing in children? Far from it. It is not only a common thing, but a dangerous thing. It is associated with a depressed circulation. What is the relation between them, and if the depressed circulation is causative, what in turn has caused it?

Convulsions are known to occur in a great many different conditions in children. What proportion of them can be explained on the ground of auto-intoxication? Take rachitis. We have not decided whether rachitis results from a nutritional disturbance or not, but we do know that they are associated invariably, and nutritional disturbances lead to auto-intoxication. Improper feeding, indigestion, gastro-intestinal disorder of all sorts, may give rise to convulsions through auto-intoxication.

Auto-intoxication most readily explains the convulsions occurring in the acute infectious fevers. In this view I am joined by Chenbach and many others. They are most apt to appear early in those infectious diseases which come on suddenly with a symptomatology of an aggravated type in smallpox, for instance, or scarlet fever. But they do not continue.

They most frequently disappear when the disease is well established, but their disappearance is not usually accompanied by a subsidence of other symptoms. What does this mean? Simply that the onset of the disease has been so sudden

that the organism has for the time being been overpowered. If death does not occur in the first charge and the circulatory and the emunctory powers of the organism rally, though the fight goes on, the convulsive stampede is checked. When the onset is more gradual, as in measles for instance, and the forces are not so severely stormed, so to speak, the organism is able to hold its own and the convulsive stampede does not take place. Late convulsions in the course of infectious processes mean a new charge in the line of a complication; broncho-pneumonia in measles, for instance.

The comparative rarity of convulsions in typhoid fever simply corresponds with the comparative infrequency of that disease under two years of age.

Early convulsions in lobar pneumonia are common. Lobar pneumonia, by the way, is much commoner under two years of age, as pointed out by Holt, than was formerly supposed. I have had a number of opportunities of observing it.

A convulsion is to a child often what a chill is to an adult, taking the place of the initial chill, as we have seen in acute infectious processes. It quite as frequently takes the place of a chill in intermittent fever. We know that important events in the blood stream coincide with the chill. Is the toxicity of the blood suddenly increased by these events? I do not know.

As yet we do not know whether the malarial parasite produces a toxine. Brousse, Roque and Lemoine have shown an increased toxicity of urine just after an attack and Queirolo has shown that the sweat collected during the sweating stage is much more toxic than that taken under other circumstances. The increased urinary toxicity may be accounted for according to Botazzi and Penzute by the increased excretion of potash salts, urobilin, as well as by the presence of peptone.

Convulsions never usher in whooping cough. They rarely occur in uncomplicated pertussis. They are most commonly seen when broncho-pneumonia (the most frequent complication) develops. I saw but one convulsion among fifty-two cases of unusual severity in in-

fants, nearly all under one year of age and most of them artificially fed, though the fatality was large. Lewis thinks that the cause of convulsions in whooping cough is threefold.

I. The nervous element which is an integral part of the whooping cough.

II. The high fever which often accompanies severe cases.

III. The venous condition of the cerebral circulation, due to the severe paroxysms of coughing, or to the pulmonary complication, or to both.

If the nervous element (?) is a factor of importance, we should see more convulsions in uncomplicated whooping cough.

It is doubtful whether high temperature unassociated with infection or intoxication will produce a convulsion unless suddenly raised to a high degree.

If the venous condition of the cerebral circulation means anything, it means carbonic acid intoxication.

Anger or other strong emotions in a nursing mother have been followed by convulsions in the child, due probably to some change in the chemistry of the milk rendering it toxic. The time occupied in accomplishing this transformation is astonishingly short.

May not fright or strong emotion in the child temporarily increase the toxicity of some of its fluids?

The reflex origin of convulsions has been an easy explanation, which has been carried far beyond the vanishing point of possibility. It has been all things to all men. To the oculist—eye-strain; to the nose and throat specialist—some slight trouble in the nasopharynx; to the surgeon—an adherent prepuce; and to the general practitioner—dentition or gastro-intestinal irritation have been ready means of accounting for spasms. Exciting causes are so intricately interwoven with fallacy that they should be examined critically.

We have been finding out of late how common eye-strain is among Baltimore school children. Adherent prepuces are not quite as common as foreskins, but infinitely more common than the sum total of spasms in my experience.

Normal dentition does not result in anything but teeth. I believe with Jacobi and Kassowitz that convulsions resulting from difficult dentition are extremely rare.

Some one has said that the frequent lancing of gums proves the frequent absence of diagnosis and the ready tribute paid to the prejudices of past centuries and the female population.

Difficult dentition means pain, if it means anything, and we are all familiar with the depressing influences of pain (especially when long continued) on appetite and digestive processes.

The gastro-intestinal disturbances so frequently associated with painful dentition result from this depressing influence, and their relation to convulsions has been already noted. This association, though not a close one, is much more satisfactory than that the trifacial conveys a protest to a group of cells (perhaps in the fourth ventricle floor), which manifest their indignation by throwing the whole body into a fit.

It will be observed that I have not considered the convulsions occurring in organic diseases of the nervous system. The so-called "symptomatic convulsions," a bad term, since the convulsions herein treated are but symptoms.

In closing permit me to offer the following conclusions.

I. Convulsions are most frequent under two years. There are two periods of frequency, under one month and between six months and two years.

II. The nature of the nerve reaction resulting in a convulsion is not understood, but it is probable that instability of nervous tissues at this period of life favor this reaction.

III. Convulsions are frequently observed in adult life and result from auto-intoxications and other causes.

IV. Convulsant substances may be introduced from without or generated within the economy.

(a) Substances useful to the economy if they accumulate become harmful—for instance, water, carbonic acid, mineral substances, the salts of biliary acids, soluble ferments, toxins not ferments in saliva, alkaloids of secretion in urine.

(b) Infectious agents may elaborate toxins.

(c) Organisms constantly present in the economy under certain circumstances may become infectious agents.

V. The instability of all the organs and tissues of the infant economy makes auto-intoxication common.

VI. Convulsions occurring in rachitis and diseases associated with great nutritional disorders; all forms of gastro-intestinal disorders; the acute infec-

tious fevers are most readily explained on the ground of auto-intoxication.

VII. Convulsions resulting from marked disturbances in the respiratory and circulatory system, as for instance asphyxia and hemorrhage, are in all probability toxic.

The reflex origin of convulsions is probably not common. It should, however, be noted that when the so-called convulsive habit is established reflex disturbance may bring on a spasm.

PERSONAL EXPERIENCE WITH LARYNGEAL DIPHTHERIA.

*By Wm. T. Watson, M. D.,
Baltimore.*

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND, NOVEMBER 20, 1896.

ALTHOUGH my experience with laryngeal diphtheria has been a very limited one, yet I venture to present it to you for the reason that the subject, however much it has been discussed elsewhere, has not been brought before the Clinical Society for at least five years, during which time the treatment of the malady has undergone a most momentous change. I trust that this brief clinical report may be the means of eliciting profitable comment from some of the older members of the Society whose experience is larger and runs back into the pre-bacillus, pre-intubation and pre-antitoxine era.

On August 7, 1893, a little over three years ago, I first made the acquaintance of membranous croup and have ever since had a profound respect for it as a foe with which to battle, although, happily, with modern scientific aids, I feel my ability to conquer in the large majority of instances.

At 2 o'clock in the afternoon of the date mentioned I was called to see A. K., a plump little boy of 18 months. He was quite hoarse and his respiration showed symptoms of laryngeal stenosis. There was no membrane to be seen in the throat; the temperature was not high and the pulse was good. I prescribed an emetic to be followed by cal-

omel at short intervals. At 8 p. m. the child's respiration seemed slightly improved. I tried to impress upon the parents the necessity of sending for me immediately if the breathing became worse during the night. I was summoned at 8.30 the next morning, only to find my patient dead upon my arrival. I asked why I had not been sent for sooner. The father replied that he thought I knew my business and that I would have called during the night had there been much danger. I was told that another child had had the same disease two years before and two doses of Doctor C.'s medicine had completely cured it. I explained the difference between true and false croup, and I made the father acknowledge that he had promised to send for me in the night if there was any change for the worse; but with little satisfaction to either of us. I left, indignant that a life should have been lost and my reputation injured through the ignorance and negligence of the child's parents. I took no blame to myself, but still the case furnished much food for reflection and, when later on, another case came under my notice, I left nothing to the judgment of the parents.

And now, after the lapse of time, and with experience in other cases, I am

forced to the conclusion that the death of my first patient was due more to the inexperience of the physician than to the ignorance of the parents—inexperience not so much in the possibilities of the disease as in the extent to which the laity are to be trusted to make observations in critical cases. The child should have been intubated at my second visit, or else I should have visited it at intervals during the night. I can confess my shortcomings in this case the more freely because I am sure that my other patients have benefited by my early mishap.

My next case was that of Joey Noark, aged 5 years and 10 months. He had been croupy for a day or two before I saw him on October 9, 1894. I watched him closely for nearly twenty-four hours, during which time the symptoms of laryngeal stenosis grew steadily worse. I then called in Doctor Booker, who intubated the child. On the fourth day the tube was removed, but in five or six hours it had to be returned. The tube was coughed up one week later and did not have to be reinserted. The medicinal treatment employed was calomel fumigations. No membrane was seen in this case and no cultures were made.

I saw my next case, Erma Murphy, aged 2 years, on August 19, 1895. She had been hoarse for four days. There was a patch of membrane on one tonsil. A thousand units of Behring's antitoxine were administered about 10 o'clock in the morning. The symptoms of laryngeal stenosis constantly increasing, I called in Doctor Chambers, who intubated at 5 P. M. One week later the tube was coughed up and the child was practically well. The diagnosis of diphtheria was confirmed by culture.

The cases to follow, occurring in the practice of other physicians, as well as in my own, were all intubated by me and so I class them together.

CASE I.—Baby T., aged 10 months. First seen by me about 9 o'clock P. M., October 1, 1895. The symptoms of laryngeal stenosis were quite severe and I intubated at 10 P. M. There was considerable bronchitis present. A large quantity of mucus had been imprisoned

below the glottis; this escaped during intubation. The child was very weak and a grave prognosis was given. Antitoxine, 1000 units of Behring's, was administered, but not until 10 o'clock the next morning. The child died quietly three hours later. The treatment had prolonged life a few hours and changed the mode of death from asphyxia to asthenia. No membrane was discovered but the diagnosis was confirmed by culture.

CASE II.—Baby G., aged 21 months. I first saw this case at twelve o'clock, midnight, October 11, 1895. Its condition was desperate, as the child had been struggling for air for twenty-four hours and more. I intubated at 12.30. The attending physician had given 1500 units of antitoxine at 7 o'clock the previous evening. The stenotic symptoms were for the time relieved and the child fell asleep. Some hours later the dyspnea returned, due, doubtless, to obstruction in the bronchi, and apparently from this the child died. The tube was perfectly clean upon removal. Death occurred at 4 P. M., October 12, fifteen and one-half hours after intubation and about twenty-one hours after the use of antitoxine. No culture was made in this case.

CASE III.—Katie Brown, aged 6 years. She, together with two sisters, had had extensive membrane on the tonsils and pharynx for three or four days, but were all progressing nicely without the use of antitoxine. On November 28, 1895, the fourth day of the disease, word was sent to me that "Katie had taken cold and could not get her breath." I found the symptoms of laryngeal stenosis quite marked and intubated at once. A thousand units of Behring's antitoxine were used two hours later. The tube was removed in one week and the child was well. No culture was made, as it was considered quite superfluous.

CASE IV.—Helen Amberg, 19 months. Was taken sick during the night of January 12, 1896. I saw her early on January 13. A large patch of membrane was present in the pharynx and the respiration was quite hoarse and somewhat obstructed. By noon the

symptoms of laryngeal stenosis indicated intubation, which was done. A thousand units of antitoxine were administered at the same time. Three and one half days later the tube was coughed up and the child was well except for a cough which persisted for a month. Diagnosis confirmed by culture.

CASE V.—Baby Rockstroh, aged 18 months. I saw the child on the morning of January 10, 1896. It had been sick and without nourishment for five days. The mother thought it was teething and would nurse as soon as the teeth were cut. Uvula, tonsils and pharynx were covered with membrane. Breathing was very much obstructed. The pulse was rapid and feeble. I intubated and for the sake of doing something, I administered 1000 units of Behring's antitoxine. The child fell asleep at once and later on took some nourishment, but passed away peacefully about twenty hours later. The diagnosis was confirmed by culture.

CASE VI.—Freddie Shelpert, aged 3 years. I saw this child with Dr. Wm. Corse of Gardenville, in March, 1896. He had a patch of membrane on the pharynx. Was quite hoarse and could only speak in a whisper. His breathing was but slightly obstructed, yet as it was evening and the child lived two miles away from my office and a like distance from his attending physician I thought it better to intubate and I did so. Had the patient lived where I could have watched him carefully, I would not have intubated so early. Intubation did no harm and probably saved a life. A thousand units of antitoxine were administered at the time of intubation. The tube was removed in five days and the child was well. No culture was made.

CASE VII.—Maudie White, aged 5 years. Seen first on June 3, 1896. The clinical picture was that of a typical follicular tonsillitis. I had made so many cultures from similar cases with negative results that I omitted it in this case. Two days later symptoms of laryngeal stenosis appeared. Cultures were then made and diphtheria bacilli demonstrated. Antitoxine, 1000 units,

were administered at 10 A. M. On June 5, at 9 P. M., the symptoms of laryngeal stenosis urgently demanded intubation, which was done. The tube was removed one week later. Recovery was complete.

CASE VIII.—Charlie Reisinger, aged 4 years. I saw this child with Dr. Corse, July 28, 1896. It had been ill with diphtheria for three days; there was membrane present in the pharynx; some symptoms of laryngeal trouble were present for three days and then the signs of stenosis developed so rapidly that its physician feared it would die before we reached it. Intubation was performed and 1500 units of antitoxine administered at the same time. Six days later the tube was removed and the child was well. The diagnosis was confirmed by culture.

CASE IX.—Charlie D. Aged about 4 years. I was called in from the street to this case. The child had laryngeal stenosis and was in need of intubation. I waited about an hour, until word came from its physician that he could not come till late in the day, and then I intubated. In three days' time the tube was coughed up and the child got well. Antitoxine was not used.

CASE X.—Farran boy, aged 4 years. Had been ill two days when laryngeal symptoms developed. They progressed in severity for twenty-four hours, when I intubated, September 11, at the instance of the attending physician, Dr. Crouch. There was much membrane on the tonsils and pharynx and a piece the size of a quarter came from the neighborhood of the larynx during intubation. Antitoxine, 1000 units, was administered several hours previous to intubation. The tube was removed in four days. The child made a good recovery. The diagnosis was not confirmed bacteriologically.

CASE XI.—Carrie Davis, aged 5 years. I was called at noon, September 21, 1896. The child had been hoarse for two or three days. She had considerable dyspnea, but her color was good and strength good. There was a large patch of membrane in the pharynx. In four hours the symptoms of stenosis

were much increased and I intubated. A thousand units of antitoxine were administered at the same time. Five days later I removed the tube and the girl was well with the exception of a harassing cough which lasted for three or four weeks.

CASE XII.—Ida Wooden, aged 4. I saw this patient at 8 P. M., September 23, 1896, with Dr. A. A. Clewell, who had been called to it some four or five hours before. The child had had laryngeal symptoms for four days. Intubation was clearly indicated, but I had not the tube appropriate to the size of the child. I sent for a tube and promised to return in an hour. I would have returned sooner, but both Dr. Clewell and myself thought the child had hours yet to live. When we arrived at the appointed time the household was in confusion. The child was said to have had a spasm and was thought to be dying. What it may have had I know not, but when we saw it it was not breathing and its pulse was feeble and fluttering. The chest heaved slightly a few times, but there was no respiration. The muscles of the body were rather limp, but there was sufficient contraction of the jaw muscles to hold the gag in place. In a minute or two the tube was in the larynx. It was the easiest and quickest operation I have performed; there was absolutely no resistance—it was like operating upon a cadaver. In a few seconds there was a slight respiration, then another, then a slight cough, and then the respirations became stronger and more frequent, but it was a matter of several minutes before the breathing was at all natural. It truly seemed like bringing the dead to life. As the respiration improved the pulse became stronger and steadier, but it was fully half an hour before it became as strong as at our previous visit. Brandy was injected hypodermically at frequent intervals. Fifteen hundred units of antitoxine had been administered at 8 P. M. The child did well and the tube was removed on the seventh day. No culture was made. The membrane was coughed up but none was seen in the pharynx.

CASE XIII.—Hilda D, aged 5 years. I was stopped on the street by the child's father, who said that his child was choking and his regular physician could not be had. I found the child in an almost suffocated condition. Within ten minutes I had secured my instruments and intubated. The child had been sick a day or two. There was a patch of membrane on the posterior wall and quite a large piece came from the larynx during operation. In four days the tube was removed and the child was apparently well. A thousand units of antitoxine were used two hours after intubation. The diagnosis was confirmed by culture.

CASE XIV.—Cora Taylor, aged 3½ years. Seen in consultation with Dr. Athey, October 10, 1896. Dr. Athey called in the morning to see another child in the same house whom he was treating for diphtheria and found this child hoarse and with some signs of obstructed respiration. By noon time, when I saw the case, the symptoms of stenosis were quite severe, having increased rapidly in gravity during Dr. Athey's trip to my office. I intubated at once and a thousand units of Behring's antitoxine were given a couple of hours later.

October 12, two and one-half days later, the child's respiration rose to 60 and there was great restlessness. The temperature was 102°. Pneumonia was suspected, but a very careful physical examination gave no evidence of it. I then feared that the caliber of the tube might be lessened by deposit and to make sure removed it. The tube, however, was perfectly clean. In ten minutes time the dyspnea became so intense that I had to put in the tube with great haste. We then concluded that the quickened respiration must be due to the diphtheritic poison and so administered 1500 units more of antitoxine. In five hours time the respiration had dropped to forty per minute and then steadily declined to normal.

October 18, eight and one-half days after the first intubation, the temperature and respiration being normal, I again removed the tube. In three-quar-

ters of an hour I was forced to replace it on account of the urgent dyspnea.

October 22, twelve and one-half days after the first intubation, the respirations rose to 42 per minute and there was great dyspnea. The tube was removed and found to be nearly occluded with a grayish-white granular deposit. The tube remained out from 11 P. M. till 12.30 (one and one-half hours) but had to be finally replaced.

October 26, sixteen days after the first intubation, the child was doing nicely as far as respiration and temperature was concerned, but she positively refused to take milk or beef tea and would take but sparingly of egg albumen. She had fallen off in weight, probably from lack of nourishment. I again removed the tube. Its removal was followed by a violent cough which lasted for three or four hours with but little intermission. She coughed on expiration and the inspiration was very much obstructed. Believing that the obstruction to respiration was due to laryngeal spasm caused by the same irritation which excited the cough, we gave the child paregoric to the extent of two drachms and also five grains of chloral. When she came under the influence of these remedies respiration was much freer and the cough subsided. Opium was administered at regular intervals to allay irritation but nevertheless the dyspnea returned and after the lapse of thirty-one hours the tube had to be reinserted.

From this time, for some reason unknown, the child took nourishment in larger quantities and became much stronger. Finally, on November 1, twenty-two days after the original intubation, the tube was removed and the child breathed quite smoothly. After a few hours it became hoarse again and has remained hoarse ever since. A week after the tube was removed, on a cold, damp day, symptoms of stenosis again showed themselves and by midnight were so severe that we feared another intubation might be necessary. Fortunately, the symptoms abated and the operation was averted. Eight days later, November 16, the child was ap-

parently well in the morning, except for a little hoarseness and a slight cough. By 10 o'clock at night she had a temperature of 103.8°, with respirations 54. Respiration was very noisy, but there was but little dyspnea. The following day the temperature was 102.5°, respirations 30, and she had a profuse urticarial eruption over the whole skin surface. On the next day her temperature was normal and has remained so ever since.

The mucus expectorated has had a very slight amount of blood in it at times ever since the removal of the tube. No culture was made from the pharynx in this case. One was made from the saliva which escaped from the mouth at the first intubation and proved negative. The material taken from the obstructed tube, twelve and one-half days later, gave practically a pure culture of streptococci; no diphtheria bacilli. I have but little doubt that at the first we had to deal with a mixed diphtheria and streptococcus infection and, in a few days, the diphtheria element dropped out, leaving a streptococcus inflammation which will get well in its own good time uninfluenced by treatment.

CASE XV.—Joseph Kanaur, aged 3½ years. This boy I saw with Dr. Corse at 10 o'clock on the morning of October 21. He had been ill for three days before a doctor was called. He had membrane on the uvula and on both tonsils. The signs of stenosis were severe and I intubated at once. He took a couple of inspirations but was unable to expire. He became cyanosed immediately. I hurriedly withdrew the tube by means of the string attached. A piece of membrane 2 inches long and ½ inch wide came with the tube, ¼ inch of it being firmly wedged in the lower end of the tube. Respiration was somewhat improved but it was deemed best to replace the tube. Seventeen hours later the tube with some membrane was coughed up. It was allowed to remain out five hours and then replaced. Seven hours later the tube, together with some membrane, was again coughed up. It was replaced in three hours. It remained in the larynx this

time for thirty hours, when, occluded with membrane, it was expelled, and did not have to be reinserted. It was doubtless a fortunate circumstance that the tube in this case was a little loose otherwise a fatality might readily have occurred from its obstruction. Antitoxine (1000 units Behring's) was administered after the first intubation. The diagnosis was confirmed by culture.

CASE XVI.—Jimmie Murtagh, aged $2\frac{1}{2}$ years. First seen at 8 P. M., October 30, 1896. Had been ailing five days, with hoarseness for one day. Membrane was present in each nostril, on the uvula and on both tonsils. Stenotic symptoms were present. At 10 o'clock 1000 units of Behring's antitoxine were used. Having seen the case comparatively early, so far as the laryngeal symptoms were concerned, I hoped that intubation might be averted by the use of antitoxine, but by 3.30 in the morning the stenosis was so severe that I felt it my duty to intubate. In three and a half days the nose and throat were perfectly free from membrane and I ventured to remove the tube, hoping that the laryngeal deposit had likewise disappeared. A piece of membrane the size of a dime was coughed up in a short time. In half an hour the tube had to be returned. It was finally removed eight and a half days from its first insertion. The child is well. The diagnosis was confirmed by culture. I am indebted to Dr. Wm. Royal Stokes, the City Bacteriologist, for the bacteriological work in the last four cases, and to Dr. George Blumer for assistance in the other cases.

After antitoxine was injected no other treatment whatever was employed. The nourishment has always been liquid and given by the mouth. Nasal feeding was contemplated in the case of Cora Taylor, but as she was a very intractable child it was postponed and finally dispensed with. Pneumonia has not been a complication in any case, neither has there been any paralysis nor unfortunate sequelae of any kind. The dosage of antitoxine in several cases, while seemingly efficient, was below that recommended by the best au-

thorities and lower than I shall use in the future. I have seen no case of laryngeal diphtheria where the use of antitoxine averted the operation of intubation.

Since the introduction of the antitoxine treatment I have seen seventeen cases of laryngeal diphtheria, all requiring intubation. Fourteen have recovered, giving a mortality of 17.6 per cent. The three cases which died were all considered desperate from the first moment I saw them; all in an exhausted condition. One died within three hours of receiving the antitoxine and the others within twenty-one hours.

In one of the recovered cases no antitoxine was used. How far the remedy influenced the results in the other thirteen cases can not of course be known with certainty; but, when we learn from O'Dwyer that in his last seventy cases of intubation without antitoxine he had fifty-one deaths, or a mortality of 73 per cent., and when we remember that the very best results ever obtained from intubation without antitoxine (those of Brown) gave a mortality of 51.6 per cent. in 299 cases, we must believe that some new influence has been at work in these instances. I might still think that perhaps I had fallen upon a series of fortunate cases were not my results very much the same as those of other physicians in private practice, as shown by the recent investigation by the American Pediatric Society. The report of this Society, as you are all doubtless aware, gives a list of 533 intubations with a mortality of but 25.9 per cent. It is interesting to note that almost this same percentage (26.77) was given by Northrup in 1888 not as the rate of mortality but as the rate of recovery.

While several of these cases might have recovered without the use of antitoxine, probably not one would have survived without intubation, and I would here make the point that it is the general practitioner and not the specialist who should do the intubating. Eight of the cases mentioned in this paper have occurred in my own practice, five of them within a year. Of the five

which I intubated probably not one would have died before I could have secured assistance, but certainly in one case the child's powers of resistance would have been seriously impaired before the specialist arrived and the ultimate result might not have been so fortunate. But it is not so much from my own experience that I make this statement as from that of others. On two occasions recently I have been called by medical friends to intubate cases for them but found the children dead upon my arrival. In another instance had the attending physician the means of removing an obstructed tube a life might have been saved. In some of the country districts I know that the diagnosis of membranous croup is equivalent to a death sentence.

These cases, in my experience, have the faculty of occurring in the families of the very poor. One hesitates to trespass upon the time of the surgeon or specialist when there is no hope of his receiving his just reward and through such hesitancy I am sure that the lives of many children are lost which might be saved were the general practitioner qualified to operate.

I wish, in conclusion, to express the profound satisfaction that I have felt in the treatment of these few cases of membranous croup. After treating measles and scarlet fever, pneumonia and typhoid, and the many other maladies which get well, we hope, because of our treatment, or die regardless of our treatment, it is a source of pleasure to the general practitioner to meet with a class of cases in which his timely aid, beyond the shadow of a doubt, rescues his patient from an imminent death. Equipped with antitoxine and O'Dwyer's instruments I esteem it a privilege to be called to a case of membranous croup. Aside from the emolument, if there be any, and the gratitude of the parents, which is always abundant, and the increase of reputation, which surely results, there is another cause of gratification in the treatment of these cases; it gives a man a feeling of power over disease and consequently a sense of pride in his profession in a great degree.

Society Reports.

CLINICAL SOCIETY OF MARYLAND.

MEETING HELD NOVEMBER 20, 1896.

THE 328th regular meeting of the Clinical Society of Maryland, Dr. S. K. Merrick, President, in the chair.

The following new members were elected: Drs. Juo. J. Abel, J. C. Bloodgood, J. G. Clark, Claribel Cone, T. S. Cullen, Henry B. Jacobs, Sylvan H. Likes, G. N. Linthicum, J. C. Morfit, Henry Page, Stewart Paton, W. M. Pearce, O. G. Ramsey, W. W. Russell, Mary Sherwood and Lilian Welsh.

Dr. Harry Friedenwald read a paper on OSTEOMATA OF THE AUDITORY CANAL.

He said "recent writers regard exostoses in the auditory canal in many cases as periosteal osteomata. They are usually globular or oval in shape and are rarely pedunculated. They are frequently multiple and often bilateral, being symmetrically placed in many of these cases. They are covered with a thin sensitive skin and are usually very hard. In some cases they have been found to be spongy, or even to contain cavities. The seat of these growths is most frequently near the mouth of the osseous auditory canal, more rarely in the deeper portions. The posterior and upper wall is the most frequently affected. When the tumors are multiple they are usually placed opposite to each other. The osteomata of the auditory canal grow slowly in most cases, and after attaining a certain size remain stationary. But in some cases they have developed in a few months. Concerning the cause little is known excepting that heredity plays an important part and that many cases are preceded by catarrhal or suppurative inflammations of the middle ear. The symptoms produced are very slight until the tumor, or the tumors, attain a large size. They become serious when they cause accumulations of wax, or pus, behind them. As long as there is some free space left in the caliber of the auditory canal the hearing is not impaired, but if the canals become en-

tirely closed either by the tumors themselves or by accumulating serum or pus the impairment of hearing may be very great. In the last mentioned case the gravity of these tumors becomes most apparent for retention of pus may occur with all its necessary consequences. Besides this these tumors at time produce great pain from the pressure of their ulcerated walls upon the canal. Concerning their treatment we should remember that when small and giving rise to no unpleasant symptoms they should not be interfered with, but when they become the cause of deafness, especially bilateral deafness, or when they produce retention of pus, their removal is indicated."

He reported two cases. The first was that of a young man suffering with chronic catarrh of the middle ear who had two exostoses in each auditory canal. They were not large enough to require treatment. "The second case was of a woman aged sixty-six years of age whose left auditory canal was completely closed by a large bony growth. There was great pain and symptoms were presented indicating an accumulation of pus behind the tumor. An operation for the removal of the tumor was performed under chloroform. An incision was made back of the auricle, long enough to release the auricle and the cartilaginous portion of the auditory canal and expose the osseous portion. This was found to be entirely closed near the tumor. The granulation tissue was first scraped away and then it appeared that the growth was attached to the upper and posterior wall of the canal. With a hollow chisel, a few blows only being necessary, we were able to separate the tumor entirely from its base. With a pair of forceps the mass was extracted and the canal was then found to be thoroughly free. The auricle was stitched into its normal position and the canal filled with a sterilized tampon. It would have been impossible to remove the growth through the auditory canal. The patient made a good recovery and was last examined seven months after the examination, when she could hear the watch at four-

teen inches and a low whisper at twenty feet."

Dr. Herbert Harlan: These cases are not very rare. I have seen perhaps five, or six of them where the growth is to the outer part, just about the edge of the cartilaginous and bony portions of the canal. Dalby speaks of those as the exostoses and I would understand from the paper that this case comes under that classification. They do no particular harm unless they close the canal. As I am limited to five minutes I will not enter into the discussion of the case, but relate one of hyperostosis, a more common trouble, that I saw operated upon two years ago. It was a young girl of thirteen who consulted me because of a very profuse and offensive otorrhea. The appearance was like this (drawing), three tumors leaving a very small central orifice. A collection of pus behind them could not be removed by syringing because the opening was so small. I thought the condition exceedingly dangerous and advised an operation. I had constructed some particularly long dental drills with conical points and had an assistant to run the dental engine, but it was exceedingly difficult to make any impression upon the growths. While these new drills will cut through compact bone easily they make little impression upon these bony tumors. I believe they would cut ivory better. I succeeded finally, however, in cutting through one of them. It is difficult to do with the engine what Dr. Friedenwald said, and I subsequently removed the remaining part of this one and one of the others with the chisel and hammer. I happen to have seen this patient within the last week and the case has only been successful to the extent of making her safe and giving a free outlet for the pus. There is still some otorrhea. She syringes the ear once or twice a day and as she hears the watch readily at six inches she is not inclined to submit to any further operation. A radical operation for cure of otorrhea might destroy what hearing she now has, so I have not insisted that another operation be performed.

Dr. Samuel Theobald: I have had the fortune to meet with several cases of exostosis of the auditory canal during the twelve months and one or two of them might be of interest in this connection. In the first place I would say that my experience with the dental drill was very much like that of Dr. Harlan. One of the great difficulties was that the canal soon became filled with blood and it was impossible to see exactly what the drill was doing. It goes ahead with a great deal of vim and accomplishes some execution and it is well to do the work accurately where needed. I found it difficult to satisfy myself that I was confining the action of the drill to the desired point.

One of my cases had exostoses in both ears; in one ear it was more or less pedunculated, while in the other there were two that almost met in the center. I removed the first with the chisel and had little difficulty. In the ear in which there were two, however, I was convinced that nothing could be done without a general anesthetic. I began with the drill and after becoming discouraged, took to the chisel and hammer and succeeded very satisfactorily in removing both exostoses so that there was practically no narrowing of the canal afterwards. I had made for this purpose a little gouge, smaller than those in general use, less concave and square across the end so that there was not the same risk of slipping for I had found that the general ones had a tendency to slip from the base.

I syringe out the ear before and after the operation with a saturated solution of boracic acid and cover the wound with iodoform gauze. In all my cases healing took place without any trouble, though in the one which I have described there was such an extensive chiseling away of bone material that slight suppuration followed.

I do not quite agree with Dr. Friedenwald that these cases are mostly of the ivory character. My experience has been that such cases are the exception. My cases were mostly made up of cancellous bony tissue.

Dr. Friedenwald: In reply to what

Dr. Theobald has said concerning the relative frequency of the very hard osteomata of the auditory canal I desire to explain that my statement is not based upon personal experience but upon the best authorities who have written upon this subject; thus Steinbrugge (in his chapter on the pathology of the ear in Orth's work on pathology) says that the hard exostoses are the most common, that spongy forms are much rarer and that those containing cysts are very seldom seen.

Dr. R. L. Randolph read a paper entitled PANOPHTHALMITIS OF OBSCURE ORIGIN IN AN INFANT NINE MONTHS OF AGE.

"A year ago I was called to see a baby girl nine months old. A week previously the family physician had seen the child for a cold and noticing that it had slightly inflamed eyes had prescribed a boric acid wash and had given the matter no further thought. At the end of the week his attention was again attracted to the eye and he observed for the first time a whitish deposit in the pupillary field and concluding that the trouble was something more than conjunctivitis requested me to see the child. The infant was a strong healthy one, seemingly in no pain and easily diverted by its playthings. The child had no fever, but I noticed that there was a slight coryza showing itself in running at the nose and some little catarrh of the upper part of the bronchial tubes. The affected eye was uniformly congested. The cornea was perfectly clear, the pupil much contracted and its area filled with a grayish exudate. There was also a deposit of this exudate on the floor of the anterior chamber. The tension of the eye was slightly below the normal and the eyeball did not seem sensitive to the touch. There was no history of a blow. The usual remedies were tried, such as strong solution of atropine and hot douches, and, at Dr. Theobald's suggestion, small doses of gray powder were given, and inunctions of mercury were used. Nothing, however, availed to stop the progress of the disease, which went on developing into

panophthalmitis in its most typical form. On the 14th day the eye was protruding and the lids were edematous. The suffering at this stage was evidently considerable and at one time I had determined to open the eyeball and let out the pus, but when I came, prepared to operate, I found that the eye had burst at a point just between the cornea and the insertion of the external rectus muscle. The eyeball at present is two-thirds the size of its fellow."

Dr. Hiram Woods: There is very little to add to what Dr. Randolph has said of this singular case. He has described the clinical features of panophthalmitis that were followed in this case typically. The case would seem to be a panophthalmitis extending from suppurating choroiditis. He speaks of the tension being minus when he first saw the case and it might be interesting to know whether there is anything in the past life of the child from which a metastatic choroiditis could arise. The minus tension would indicate that the case was not as acute as supposed. I have seen a number of cases following meningitis, and I recall one seen in Waverly in which the child's eye remained in the same condition for some time and then underwent phthisis bulbi. These troubles, when they do not come from infection, either post-operative or through corneal wounds, are usually due to some of the infectious diseases. The greatest in this case lies in its cause and the history, it would seem, may have to be studied previous to the time when Dr. Randolph saw it.

Dr. R. L. Randolph: In reply to Dr. Woods, I may say that the child's life had been exceptionally free of sickness. Panophthalmitis following penetrating wounds of the eyeball is not an infrequent occurrence and it is also seen as a result of some one of the exanthemata and of cerebro-spinal meningitis, but we have in this case an instance of the disease apparently not associated with a constitutional affection and an injury I think can be absolutely excluded. It may be remembered that I spoke of the child having catarrh. It is possible that the child was suffering with "grippe,"

which to my mind is clearly a disease of bacterial origin. This being the case it might easily have happened that an infected embolus formed in one of the vessels of the retina or choroid which, if true, would easily explain the panophthalmitis. The organism was undoubtedly at the last present in great numbers, as the swelling of the eyeball and its surroundings was enormous, as might be inferred from the fact that the eye ruptured.

Dr. Harry Friedenwald: It is interesting at times to see what relatively unimportant things may cause panophthalmitis. Knies says that it may arise from furuncles. We had a case at the hospital sometime ago in which the only probable cause was a chronic urethritis.

Dr. Herbert Harlan: I might mention a singular case I saw some years ago. The patient was a frail, sickly girl, who had had some iritis, corneal opacities, etc. She had very poor vision and I suggested that a new pupil made by iridectomy might perhaps improve her vision. She came for the operation, but being very busy that day I postponed it. The next day she appeared with a violent inflammation of the eye and in two or three days had a complete panophthalmitis, and the eye went on to complete destruction. I never learned the origin of the trouble, but I congratulated myself that I had not operated on that particular day.

Dr. Wm. T. Watson read a paper on PERSONAL EXPERIENCE WITH LARYNGEAL DIPHTHERIA. (See page 241.)

Dr. J. W. Chambers: I am expected to open the discussion, but there is scarcely anything left to be said after the excellent paper of Dr. Watson's. I will simply make a few remarks about intubation. This is a comparatively new operation in croup and while it does not completely take the place of tracheotomy, it will replace that operation in children under six years of age. It is an operation, as Dr. Watson has said, that ought to be done by the general practitioner. It is scarcely more difficult than the ordinary catheterization. Everyone would expect the practitioner

to be able to do that, and the time is coming when he will also be expected to do intubations. It goes with antitoxine and he must be able to use both. It is an operation that has but few dangers. I think of but one at present and that is the possibility of forcing the membrane down the tube and plugging it up. That necessitates the removal of the tube at once. I have had such an accident occur twice; one patient died on the table and on opening the trachea we found it filled with membrane. The other child lived a few hours, but came near dying on the table, due to the fact that a small piece of membrane was caught in the tube. I saw one case in which the tube became plugged by two lumbricoid worms. The child suddenly sprang up in bed, showed want of air and the tube was removed, but it is a question whether this accident should be charged to the tube.

In children beyond six years of age I do not believe intubation is equal to tracheotomy. The oldest child I intubated was thirteen, and it died. I should have done a tracheotomy, but the parents objected to intubation; the next best thing was done. He had been sick for some time and had antitoxine, but there were symptoms that made me prefer tracheotomy to intubation.

Intubation may be done by one who is not a specialist and not particularly skilled in the use of instruments. If he can find the upper end of the larynx he can introduce a tube. I have once or twice had some difficulty in extracting the tube but such occasions are the exception and every general practitioner ought to be prepared to do this operation. I would like to add one word about antitoxine. Most of us, as Dr. Watson has suggested, give it in too small doses. I am sure I have seen cases lost because the patient did not get a sufficient dose. I should not hesitate to give two or three pretty large doses. The question is not usually how much, but whether it is a pure antitoxine.

Dr. F. D. Sanger: Dr. Watson is to be congratulated upon the results he obtained. One of his cases was certainly a resurrection and I think the case that

lived in Gardenville, or some place distant from his office, should be congratulated that it did live that far away because it lead to his intubating somewhat earlier than he otherwise would have done. The object of intubation is to give rest. There is no more exhaustive a thing than dyspnea and there are few more exhaustive diseases than diphtheria. The two are hard to endure.

It is unjust to compare intubation with tracheotomy except in cases over thirteen years of age. Tracheotomy has been considered as a *dernier ressort*. Intubation is not. Dr. Watson's success has been largely due to his close attention to his patients and early intubation. In regard to obstruction of the tube I had an experience of that kind some years ago. Dr. Chambers was out of town and I was called to one of his cases. I was not prepared at the first visit to intubate and when I saw it a few hours later the dyspnea had markedly increased. I intubated that child, but some membrane plugged the tube and it had to be removed. This occurred the second time and by the time I had introduced the tube the third time the child was dead in its mother's arms. Had I intubated when I first saw it in the morning the chances of saving that life would have been very much better. It is an easy operation, as has been said, that can be performed by the general practitioner and valuable time should not be lost in sending for a specialist. The object is to secure rest and it should be secured early.

H. O. REIK, M. D.,
Secretary.

WALKING DIPHTHERIA. — Dr. E. B. Gleason reports in the *Medical Council* several cases of diphtheria in persons so slightly ill that they walked about, thus spreading contagion. He thinks that such cases will always be a menace to the public health as they occur more frequently than is usually supposed and the impossibility of quarantining such individuals is evident. Cases may also be chronicled where the Klebs-Loeffler bacillus is always present. Health Boards can effect nothing in these cases.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE: "

913 F Street, N. W.

BALTIMORE, JANUARY 16, 1897.

THE renewed interest in the Library of the Medical and Chirurgical Faculty by recent endowments still continues. The Book and Journal Club, which supplements the work of the library committee by supplying many new books and journals, at its meeting last Wednesday night reported progress and not only showed itself to be in a flourishing condition, but proved its popularity by the large attendance.

It is of interest in this connection to note this little bit of history of the Faculty library which was recently unearthed by Dr. Harry Friedenwald, a member of the Library Committee and the Secretary of the Book and Journal Club. He lately came upon the following note which appeared in the first volume of the *Maryland Medical and Surgical Journal*, (page 400) published in 1840 under the auspices of the Medical and Chirurgical Faculty:

"In the year 1799, the Legislature of Maryland granted a charter, incorporating 'The Medical and Chirurgical Faculty of Mary-

land.' The end of the charter was to encourage the cultivation of a high grade of medical and surgical knowledge. It required persons before beginning the practice of medicine and surgery in Maryland, after a specified day, to apply to the Faculty for license to practice. It directed an election, annually, of a Board of Examiners, consisting of well-educated physicians and surgeons, to examine candidates, and, if they were found competent, to grant them licenses. For the purpose of raising a fund for the diffusion of medical and surgical knowledge, each licensee, on receiving his credentials, was required to pay a fee of not more than ten dollars to the treasurer of the corporation.

"The fees placed in the treasury amounted, after thirty years, to several thousand dollars, nearly all of which had been invested in bank stock. At the annual convention it was often a question for general conversation: 'How ought the funds to be used, so as to answer the end of the charter?' At length, at the convention of 1830, the late Professor Samuel Baker introduced a resolution for making an appropriation of five hundred dollars for the purchase of books, to be kept in a suitable place, under the direction of a committee, for the use of the members of the Faculty. The convention being well attended, the resolution was thoroughly discussed; and, to the gratification of its friends, it met with no opposition that did not finally yield to a conviction of the practicability and usefulness of the proposed measure. The resolution was triumphantly carried; and thus was laid the foundation of a library, which has since, by a continuance of annual appropriations out of the dividends from the bank stock, gradually become a very valuable collection of ancient and modern writings.

"The shelves of the library now contain the time-honored volumes of Hippocrates, Aretaeus, Aetius, Paulus, Orisbasius, Actuarius, Celsus, Scribonius, Marcellus and other diligent and hardy pioneers; besides the labors of many of their successors of various nations and of successive eras; including the enlightening researches of our own day. The existence of such a collection, as the catalogue of this library announces to be at the command of the members of the corporation throughout the State, is one of the results of care with which the Faculty has endeavored to use its funds, wisely, for a

permanent diffusion of medical and surgical knowledge.

"The object of publishing this notice is, to intimate to all whom the advancement of science may concern, that, as the library fund is needed for the purchase of modern books chiefly, the hope of being able to enlarge the collection of old authors is founded on the supposition that there are many owners of old volumes and pamphlets in Maryland and perhaps elsewhere, who may be disposed to transfer to this institution the responsibility of the safe-keeping of these remains of ancient times.

"Samuel Chew, M.D., Librarian, No. 88 North Howard Street, will receive and catalogue all donations to the library.—John Fonerden, Chairman of the Board of Library Directors."

This is an extremely interesting bit of history and well worthy of record. There is one mysterious part in the history of the Faculty and that is the disappearance of its small capital. At one time the Faculty had accumulated some money and owned a building, but bad management and other causes soon dissipated the small endowment.

It is fortunate now that the present endowment is so well arranged. Interest in the new building, however, should not be allowed to die out.

* * *

MUCH has been said of diet kitchens and cookery schools in late years of training in the preparation of dainties
A Bureau of Diets. as a part of the curriculum of hospital training schools, but the doctor is still compelled to trust to luck in regard to the nourishment of his invalid or convalescent patients and to limit the diet of the desperately ill to a monotonous round of two or three standards which can be bought at the dairy or drug store.

If he desires rectal alimentation for his patient he is dependent upon unskilled persons for the preparations used and cannot therefore venture on the more scientific aliments used with so much benefit by the great foreign teachers and writers; and the patient, who might be nourished thus for many weeks, sinks for lack of these therapeutic resources in a few days.

The specialist in stomach and intestinal diseases finds himself unable to apply the diets which are essential to his studies and

cures. He calls to his aid in turn the patient's cook, the druggist, the manufacturing pharmacist, and finds that he has simply wasted his time and obtained nothing satisfactory. They are skillful; but it is not in their line of work.

If a diabetic, gouty, or other such patient is to be dieted, the physician is met at the beginning by the difficulty of securing bonafide, palatable gluten or other breads of low starch percentage, or the patient buys them of various sellers with starch percentages unknown to the physician. Some of these "gluten" breads have more starch than ordinary table bread and some have had an undetermined amount of the forbidden sugar or molasses added to them. In regard to vegetables, meat, etc., for the diabetic the physician must spend hours in explaining to the caretaker what shall not be given, a knowledge of the current market not being within his reach.

In order to meet all these dietary and therapeutic needs a graduate of diet training from one of the leading hospitals of our country has opened a Medical and Family Bureau of Diets for the Sick and Dainties for Invalids at 525 North Charles Street, Baltimore. Here may be obtained broths, peptonized and otherwise, jellies, fresh meat juices, dietetic breads, convalescents' beverages, tempting custards and special milk preparations. Special prescriptions for diet will be filled here just as those for medicines are filled by the druggist, in the same professional confidence. Organo-therapy will now be possible strictly in accord with physicians' directions. So too with rectal alimentation when ordered by the doctor. Patients needing diabetic or other special diet courses may be referred here for lists of available dishes in market and simple advice for preparing those not made in the Bureau.

The Bureau is wholly independent of any other control than that of its founder and has been established with the cordial approval of a number of respected physicians and specialists in this city.

Articles furnished will be sent to any point in city or country, daintily served or ready for simple preparation. The great want for just such a bureau as this and the necessity of bringing its existence to the notice of all physicians has prompted this extended notice.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 9, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		20
Plithisis Pulmonalis.....		22
Measles.....		
Whooping Cough.....	5	
Pseudo-membranous Croup and Diphtheria. }	27	9
Mumps.....	1	
Scarlet fever.....	32	1
Varioloid.....		
Varicella.....	3	
Typhoid fever.....	4	3

Sir Joseph Lister has been made a peer.

The Baltimore Health Department mortality list is in sad need of revision.

The Massachusetts General Hospital has inherited a valuable tract of land in Brookline.

Dr. J. McPherson Scott has succeeded Dr. T. W. Simmons as health officer of Hagerstown.

The Hospital for Consumptives of Maryland elected directors at its annual meeting last Monday.

The maternity ward of the Johns Hopkins Hospital is now open. Only patients unable to pay a physician are received.

The Thorndike Prize at the Harvard Medical School was not awarded this year because no essay came up to the standard.

The physicians of Louisville who were compelled to pay an income tax have brought suit and the courts have decided that they need not pay the tax.

The fund of five thousand dollars for a memorial to Dr. Wilhelm Meyer, the discoverer of the treatment of adenoid vegetations of the pharynx, is sufficiently large.

Mayor Hooper of Baltimore has acted wisely when he put Drs. Charles C. Bombaugh, Lilian Welsh, John T. King, Frank C. Bressler and A. Friedenwald on the School Board.

Dr. Gilles de la Tourette has been appointed physician-in-chief to the Paris Exposition, to be held in 1900. There will be an exhibit of objects illustrating the progress of medicine and surgery.

The State Board of Health is completing plans for the State Sanitary Congress to be held in Baltimore. Many of the county health officers have shown a willingness to attend the meeting at their own expense.

Theodore Wormley, M. D., Ph. D., LL. D., Professor of Chemistry in the University of Pennsylvania, died in Philadelphia last week. Dr. Wormley was graduated from the Philadelphia College of Medicine and Surgery in 1849.

Philadelphia has suffered a loss in the death of Dr. William H. Pancoast, son of the distinguished surgeon Joseph Pancoast. Dr. Pancoast was born in Philadelphia in 1835 and was graduated from the Jefferson Medical College in 1856. He was formerly a professor in his alma mater.

The Baltimore Journal Club of the Faculty held its annual meeting last Wednesday night at the Hall of the Faculty. After a statement of the year's work by the President, Dr. Osler, and a financial statement by the Treasurer, reports of progress in various departments were made.

The death is announced of Dr. Samuel Boyle of Baltimore, in his sixty-fifth year. Dr. Boyle was graduated at Edinburgh in 1866 and had been in this country for about thirty years. He was a volunteer physician during the yellow fever epidemic in the South and received the thanks of Congress, with extra pay.

The Nurses' Directory, 847 North Eutaw Street, Baltimore, controlled by the Medical and Chirurgical Faculty, has now sixty graduate nurses registered. There is no fee charged the patient, the nurse paying one dollar for each case. Physicians may send for any special nurse, and can obtain nurses at any hour of the day or night. There being a long distance telephone in the building, physicians out of the city can communicate directly with the Directory. If the profession will always engage nurses through the Directory and see that their own nurses are registered, they will contribute greatly to the success of the Directory and to the funds of the Library.

Book Reviews.

THE PRACTICE OF MEDICINE. By Horatio C. Wood, A. M., M. D., LL.D. (Yale), Professor of Therapeutics and Clinical Professor of Nervous Diseases in the University of Pennsylvania, and Reginald H. Fitz, A. M., M. D., Hersey Professor of the Theory and Practice of Physic in Harvard University. 8vo, Pp. x, 1071. Philadelphia: J. B. Lippincott Company, 1897.

The fact that Osler's Practice of Medicine has enjoyed a monopoly of late has induced other writers to put out books which shall be satisfactory to physician and undergraduate. The combination of Wood and Fitz can not help being good. Dr. Wood deals with the therapeutics and nervous system and a few other parts, while Dr. Fitz writes the rest. There is no especial note to be made of this work as it gives one the impression of hasty composition; it is nevertheless very comprehensive. Much of good in the book is marred by poor print and cheap, thin paper used with a view of making the book thin. The work of two such men will undoubtedly attract attention.

The first number of Charles Wood Fassett's *American Medical Journalist* appears with an excellent likeness of Dr. John B. Hamilton on the cover, backed by a young woman on the frontispiece. The make-up of this number is very attractive and the beautiful clear type very dainty. The subject-matter is well chosen and varied and the whole number is full of interest. The field, however, seems rather limited. The cover page is unique but not especially artistic. The writers are principally from St. Louis. Mr. Fassett is to be congratulated on his enterprise.

Lea Brothers and Co., of Philadelphia, announce The American System of Medicine in four volumes, edited by the late Dr. A. L. Loomis and Dr. W. Gilman Thompson. Volume I is almost ready. It is for sale by subscription only at \$5, \$6 and \$7 a volume, according to the binding. Among the contributors are Drs. I. E. Atkinson, Thomas S. Latimer, F. T. Miles, William Osler, William S. Thayer, Wm. H. Welch of Baltimore, and W. W. Johnston and Surgeon General George M. Sternberg of Washington. The first volume is almost ready and the others will follow soon.

Current Editorial Comment.

EXPERT TESTIMONY.

New England Medical Monthly.

FEW regular physicians in good standing are guilty of gross errors or neglect, and it often occurs that there is something more than a feeling of injury which prompts the suit. It is a sad commentary upon our calling, however, that professional jealousy may ever attain to such vindictiveness and it is an even greater reproach that prominent men can be induced, on such occasions, to go upon the witness stand and in a few well chosen words blast the reputation of brother physicians, who may even be personally unknown to them.

MEDICAL ADVERTISING.

Western Medical Review.

SOCIETY has a claim on every man, and by the doctor attending to his social duties he will probably impress someone with the idea that he will be a good physician to call in when he becomes ill. By making himself agreeable to all whom he may meet, without overdoing it; by dressing neatly and being cleanly; by driving a good horse and buggy if he can afford it; by being a gentleman at all times, in all places, and under all circumstances—these are legitimate and honorable methods of advertising. It is advertising that costs nothing, but it is advertising that pays. The conscientious physician, the honorable physician, the self-respecting physician, will advertise in this way and no other.

BAD BILLS.

Medical Record.

As an offset to the generally acknowledged abilities of the physician in every other line of his work, it is also quite universally admitted that he is entirely deficient in business tact. Whether or not he is willing to accept such a verdict from his patients, he is nevertheless at certain seasons, when bills are sent to his otherwise grateful debtors, aware of a glaring fact that there is a marked difference between actually earning his money and in being promptly paid. Often content with the sentimental side of apparent appreciation of services rendered to his patrons, of lives saved, of suffering assuaged and of health restored, he is too easily satisfied with the reflection that he has a very noble profession but a very poor trade.

Publishers' Department.

Convention Calendar.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LEWELLYN ELLIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

AMONG the handsome and artistic catalogues for 1897 is the one issued by the Columbus Phaeton Company, entitled "A Story of Some Phaetons." This catalogue, like the products of the Columbus Phaeton Co's. factory, is the result of painstaking effort, good judgment, artistic pride and thoroughness in detail. Copies are sent physicians for the asking.

ANTITOXINE.—The use of such strong applications as the undiluted tinct. ferri chlor. and the argent nit. I most emphatically condemn, believing that they do positive harm. Diphtheria is a systemic as much as it is a local disease, and the treatment therefor should be both local and systematic, and I believe that in the serum therapy we have a remedy which, if used early in the disease, will prove itself almost, if not entirely, a specific. So thoroughly am I convinced of its efficiency that I keep constantly on hand a supply. The only serum I have used is prepared by H. K. Mulford Company, Philadelphia, Pa.—R. B. HOPKINS, M. D., Milton, Del.

THE UNTOWARD EFFECT OF SUBSTITUTES.—A. M. Collins, A. M., M. D., of Shelbyville, Ill., writes under date of November 2, 1896: "I never realized the vast difference between genuine Antikamnia and the various substitutes that are being palmed off, until within the past few days; and the realization was all the more pronounced because I myself was the patient. For four weeks I had been suffering with neuralgia of a very severe type and attended with considerable febrile movement. I tried the various compounds and other preparations, lauded as 'just as good' but with no real advantage and with no little heart disturbance. On Saturday, I went to Arcola, and while there was taken very sick with one of my neuralgic attacks. I sent to the drug store for some genuine Antikamnia and to be certain about it, procured an unbroken original package. I took it in eight to ten grain doses at intervals of two hours. The effect was magical; the first dose relieved the severity of the pain, while the second quieted it entirely, and I went to bed, sleeping all night with one awakening of a few moments only, a thing I had not done in four weeks."

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Original Articles.

THE IMPORTANCE OF LABORATORY METHODS IN DIAGNOSIS.

By Charles E. Simon, M. D.,
Baltimore.

FIFTH PAPER.

The examination of the feces.—An examination of the feces should be made in all obscure cases of gastro-intestinal disease, as information of value may thus be obtained which could not have been gathered in any other manner.

Amoebic colitis, for example, can only be diagnosed by means of the microscope and successful treatment in this disease, more particularly, presupposes an absolutely correct diagnosis. The experience gathered at the Johns Hopkins Hospital goes to show that this form of colitis is by no means uncommon in the vicinity of Baltimore and the writer would urge upon the physicians living in the country the importance of a careful examination of the feces in every case of "dysentery" or "chronic" diarrhea. The life of the patient will frequently, nay, almost always, depend upon an accurate and early diagnosis.

Patients not infrequently apply to the physician for treatment "because they pass a little blood in their stools." Such cases should always be examined with care and not sent from the office with a simple prescription for supposed piles. A number of such cases have already been reported in which a careful examination of the anus revealed

not only the absence of piles, but showed the presence of the amoeba coli in the feces. Further questioning then brought to light that these patients had recently passed through an attack of dysentery. It is very probable that liver abscess, referable to the amoeba coli, would have followed, had proper treatment not been instituted at once.

Piles should only then be diagnosed when they have been actually seen or felt. Physicians generally look at the throats of their patients when they have been informed that they are sore. Why should the anus be thus neglected?

The diagnosis of "intestinal indigestion," viz., chronic intestinal catarrh, should never be based upon the subjective symptoms of the patient alone, but upon the clinical history, taken in conjunction with the results of a careful general examination, including an examination of the gastric contents and of the feces. The almost frantic manner in which almost everything is lately regarded as intestinal indigestion and treated with the various preparations of diastatic ferments is, to say the least, amusing. The journals are full of reports upon the action of such preparations in intestinal indigestion. The writer has undertaken to study the re-

ported cases somewhat critically and has reached the conclusion that the diagnosis was not once beyond doubt. "Biliousness" is fortunately beginning to go out of fashion. May "intestinal indigestion" not take its place!

Nothnagel has shown us that it is not only possible by means of a microscopical examination of the feces to definitely recognize the existence of a chronic catarrhal condition of the intestines, but also to determine its seat with a fair degree of accuracy. His principal conclusions may be summarized as follows:

1. The presence of pure mucus in the absence of fecal material in the dejecta may be regarded as indicating a catarrhal condition of the rectum, sigmoid flexure or the lower portion of the descending colon.

2. A coating of scybalous masses with mucus is usually found in catarrhal conditions of the rectum and the descending colon.

3. A chronic catarrh of the lower segment of the intestine, viz., rectum and descending colon, cannot be excluded, however, by the absence of notable amounts of mucus upon scybalous masses.

4. The presence of hyaline particles of mucus which are visible only with the microscope and which are intimately mixed with the firm or thickly, mushy feces, in the absence of mucus visible with the naked eye, indicates a catarrhal condition of the upper portion of the large intestine, or of the small intestine.

5. The presence of small yellow particles of mucus in the feces indicates disease of the small intestine.

6. The occurrence of a typical bile pigment reaction, when the feces are treated with nitric acid, indicates the existence of increased peristalsis throughout the entire large intestine and the lower portion of the small intestine. From the character of the pigmented constituents of the feces, moreover, it is possible to state whether we are dealing with an increased peristalsis, *per se*, or whether we are dealing with a catarrhal condition of the small intestine.

7. The presence of cylindrical epithelial cells, leucocytes and fat droplets stained with bile pigment, as also of the yellow particles of mucus already mentioned, indicates catarrh of the small intestine associated with increased peristalsis.

8. The presence of an abnormally large number of muscle fibers, as also of starch granules and of fat, is associated with increased peristalsis of the small intestine.

It is thus clear that a careful microscopical examination of the feces will not only indicate the existence of a catarrhal condition of the intestine, but approximately also its seat. If a positive result be reached we may assume that intestinal indigestion exists, as the presence of abnormally large quantities of mucus upon the intestinal mucosa will of necessity interfere with the prompt absorption of the products of salivary, gastric and pancreatic digestion and give rise to increased fermentative and putrefactive processes. The mere occurrence of rumbling, flatus, distension of the abdomen, constipation, anorexia, coated tongue, headache, etc., is not sufficient to establish the diagnosis; the feces must invariably be examined likewise, not to speak of the gastric contents.

An examination of the feces is furthermore indicated in cases of so-called "simple colic." The great majority of these are in reality instances of cholelithiasis and a careful sifting of the feces after an attack will not infrequently lead to the discovery of one or more little gall-stones. The general practitioner should ever bear in mind the dictum of Riedel, the correctness of which has since been amply demonstrated, that icterus does not occur in the great majority of cases of cholelithiasis and that attacks of colic, which do not yield to treatment directed toward the stomach, should be transferred to the surgeon. Anthelmintics should never be administered unless an examination of the feces has revealed the presence of parasites or their ova.

General Technique.—Patients should be instructed to send their stools, as

soon as passed, to the physician's laboratory. Preserving jars made of glass are most convenient for this purpose. In every case the examination should be made on the day on which the specimen is received, and a careful record kept for future reference. This record should contain a general description of the stool as it appears to the naked eye. Its color, consistence and configuration, the presence of mucus, blood, pus, remnants of food, such as curds of milk, undigested bits of meat, vegetables and fruit, seeds, parasites, etc., should all be noted.

If the stool be formed or of a mushy consistence, a portion should be stirred with water and placed in a conical glass for sedimentation. Several drops of the sediment are then spread out upon a glass slide, or a piece of window glass, as described in the examination of the sputum, and examined first with a low and then with a high power. If the examination with the naked eye has revealed the presence of mucus, bits of this should be separately examined with the high power under a coverglass. In the case of a liquid stool it is best not to add any water, but to examine various particles as such, a drop of dilute saline solution (0.6 per cent.) being added, if necessary. In every case particles of mucus should be sought for and studied with special care. Whenever a dysenteric stool is examined, or whenever it is desired to search for amoebae it is well to heat the stool to the temperature of the body and to thoroughly warm the microscopic slide. A warm stage is very convenient, but can be readily dispensed with.

The Amoeba Coli.—The stools in amoebic colitis may vary greatly in appearance. In fresh cases they are usually small in amount, mucoid and streaked here and there with pus. A few grayish white threads are probably always present and in these the amoebae are most abundant. At other times the stools apparently consist of a greenish pultaceous mass in which large, irregular sloughs may be found. In the more chronic cases, however, the stools may be formed, but are covered with large

threads of mucus, or may even be entirely enveloped in this material. In this mucus the amoebae will be found.

The appearance of the amoebae is also variable. When at rest they assume a circular, ovoid outline presenting a granular interior so as to resemble a large leucocyte. Most characteristic, however, are the actively moving organisms. Their outline then is irregular. If one of these be studied under a high power a rounded transparent hemispherical knob will be seen to project from some portion of the parasite into which the granular contents of the main body will flow. By thus throwing out pseudopodia the animal is capable of a fairly rapid progression. When once seen they will always be remembered, and are then easily recognized.

The diagnosis, "amoebic colitis," should hence only be made when actively moving amoebae are found, unless indeed, the examiner has had a fair amount of experience, but be it remembered that cold will cause the organisms to assume the circular outline and to become quiescent. Whenever, then, suspicious-looking bodies are found, the slide should be carefully warmed, so as to cause the animal to throw out pseudopodia. Quiescent forms only are found in patients undergoing treatment (irrigation of the colon with a solution of quinine), and in such cases even the application of heat will not call forth any manifestations of life.

It is important to remember that the amoebae may reappear in the feces, when treatment has been suspended for several weeks, and as the patient is always exposed to the danger of amoebic liver abscess as long as amoebae are found in the stools, an examination should be made from time to time, and treatment renewed, until they have disappeared once for all.

In this connection it may not be out of place to point out the fact that the presence of amoebae in the expectoration invariably indicates the existence of liver abscess, often with perforation into the lung, a not uncommon, nay, even frequent, result of amoebic colitis.

Mucus.—The presence of mucus in

the feces must be regarded as an abnormal event in every case. From the standpoint of diagnosis it is further important to note the form in which it appears, whether it be bile stained or not, its relative position in the feces, *i. e.*, whether it occurs upon the outer surface of the stool only, or whether it is found intimately mixed with the feces. Stools are thus met with in which the formed stool or scybalous masses are coated with a thick layer of mucus. In such cases this always presents a transparent, more or less cloudy appearance and is always white or gray, when isolated from the fecal material. In other cases the mucus is intimately mixed with the feces. The latter may be liquid, in which case particles of mucus of variable size may be seen to float about in the stool. Or, again, the stool is mushy in which case the presence of mucus will only be recognized by stirring the mass with a glass rod. Nothnagel has further pointed out that mucus may be present in formed stools in notable quantities, but only recognizable with the microscope.

In another set of cases nothing but irregular masses of pure mucus are passed, when it is of course recognized without difficulty. A similar condition is observed in cases of so-called mucous enteritis. The mucus here appears in the form of bands or cylinders of variable length. In still other cases mucus is found in the form of small yellowish brown or greenish little granules of the size of a poppy-seed and chemical examination will show that the pigment in question is bile pigment. If a drop of concentrated nitric acid be allowed to flow under the coverglass from the side, the typical change of color from yellow to green, to blue, finally to violet, will be observed (Gmelius' reaction).

While the presence of mucus, when occurring in larger masses, is readily recognized with the naked eye, the microscope is necessary, as already mentioned, to establish its presence when it occurs in the form of fine particles intimately mixed with the feces. If in such a case a bit of fecal material is spread out under a coverglass, little islets, more or less numerous, will be ob-

served which apparently consist of tiny fragments which lie closely together, but are still each separated from the other by a very narrow interspace. This appearance is quite characteristic and is common to both the white, *viz.*, gray and yellowish brown particles of mucus. Nothnagel regards their presence as characteristic of disease of the small intestine.

In liquid stools finally roundish or irregular, very pale, hyaline and opaque particles may be found with the microscope, which are devoid of any structure, and partly present a homogeneous and partly a fissured appearance. In all probability these also consist of mucus. Their clinical significance still remains to be determined.

It would lead too far to enter into a detailed consideration of the various morphological elements which may be found in the feces and their clinical significance. It will be sufficient to state that valuable information may frequently be obtained, if the feces be systematically examined in this direction.

Gall Stones.—In order to examine the feces for the presence of gall-stones they should be thoroughly digested with water and passed through a hair-sieve. Biliary concretions may then be found as small crumbling masses or as hard stones, presenting an irregular contour or the smooth characteristic facets. In size they may vary from that of a millet-seed to that of a pigeon's egg. As a rule, of course, they are quite small. The presence of large stones invariably indicates that perforation into the bowel has taken place.

Charcot-Leyden Crystals.—It would lead too far to enter into a description of the various parasites and their ova which may occur in the feces at this place. The writer, however, wishes to draw attention to the frequent coexistence of the so-called Charcot-Leyden crystals with helminthiasis, an observation which was first made by Leichtenstern and which has since been repeatedly confirmed. No special preparation of the stool is necessary. Small particles of fecal matter, diluted with a drop of water, are directly examined un-

der a high power. The crystals in question occur in the form of colorless, elongated octahedra which may vary very much in size. On the other hand, specimens may be found which are from six to nine times as long as the diameters of a red corpuscle, while others again are scarcely visible with even a high power, such as a $\frac{1}{7}$ objective (Bausch and Lomb). They are soluble with difficulty in cold water; insoluble in alcohol, ether, chloroform and dilute (0.6 per cent.) saline solution; slowly soluble in acids and alkalies and even in ammonia. Leichtenstern states that their persistence in the feces after the evacuation of an apparently complete tenia should be regarded as indicating the non-removal of the head.

In conclusion the writer wishes to refer to Elsner's method of demonstrating the presence of the bacillus of typhoid fever in the stools of the patients. If the claims made for this method should be substantiated by further study the diagnosis of typhoid fever could be made within twenty-four to thirty-six hours.

It might be well to send stools of cases of suspected typhoid fever to the bacteriologist of the Health Department for examination.

(Of late Vidal's method of diagnosing typhoid fever by an examination of the blood has attracted much attention. It seems that the method is reliable and preferable to that of Elsner. In the next paper this shall be dealt with in detail.)

SYPHILIS OF THE INNOCENT.

By Henry Alfred Robbins, M. D.,

Washington, D. C.

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 3, 1896.

THIS little colored girl, aged eleven years, has been referred to us for examination. She complains of sore mouth. On examination you will notice a typical opaline mucous patch, located just under the right bicuspid tooth. Look further and you see another in the right side of the buccal cavity, back by the first molar tooth.

You find enlargement and hardness of the post-cervical, sub-maxillary and epitrochlear glands. Dr. Arwine has placed the child in proper position on the table and you at once will notice a papular, indurated chancre, located on the right labia externa, which is edematous. Oozing from the vagina, there is a most foul discharge. On the corresponding side of the chancre, in the inguinal region, you feel a well-marked bubo. There is the macular erythema, the first eruption of syphilis extending over the chest and abdomen.

On November 11 I reported to the Medical Society three cases of what I supposed were syphilis of non-venereal origin. They were all colored female

children, each nine years old. One had enlarged glands and the inguinal and epitrochlear were especially well marked. Over the abdomen there was the characteristic macular eruption. Seated on the labia majora there were a number of condylomata and there was a slight oozing of a mucous discharge at the posterior commissure. The labia were very edematous and on account of the tender age of the child we could not make a thorough examination. The mother has brought the child with her today. You notice now that the edema has subsided and the soakings of black wash and daily dusting of calomel have caused the condylomata to disappear, also the cauliflower-like excrescences that extended to and around the sphincter ani. Upon separating the labia you see located just within the labia externa, a little to the left of the fourchette, a papular chancre, about the size of a pea, with its ring-like induration.

The water-closet has been accused of being the place where venereal diseases are acquired. There are only two ways

in which the disease can be acquired and that is by direct or indirect contact with something that contains the virus of syphilis. These cases may have been acquired by contact with the parts described, of a not properly cleansed clot, which has been used during the menstrual period of a syphilitic woman, or they may have been produced by design, as it is a well-established fact that certain of the degraded and vicious classes think that if they acquire syphilis they can rid themselves of it by giving it to a child.

Several years ago my friend Dr. Cuthbert sent for me in consultation to see a little colored boy aged five years. We found a characteristic chancre on his prepuce, enlargement of the lymphatic glands and he was covered with a macular erythema. The child confessed to us that his grown up nurse had taken liberties with his person. Only a few days ago, we had in our service a little colored boy seven years old with an acute attack of gonorrhea, the gonococci of Neisser being found in large numbers in the smear of gonorrheal pus on the slide.

This shows the great importance of having a hospital for treatment of venereal diseases where suspected servants can be sent for examination and treatment.

The world at large begins to recognize the contagiousness of pulmonary tuberculosis. Syphilis is just as contagious—I mean acquired in an innocent way. It is not a pleasant topic, neither is smallpox, but the big pox is far more dreadful, for it is not recognized and many of its symptoms are attributed to other diseases, examples of which I gave in a paper called "Syphilis of the Vital Organs."

It is fashionable just now to establish sectarian hospitals for the treatment of the eye, ear and throat. Take away syphilis and there would be no necessity for such hospitals, as it is the chief cause of the eye, ear and throat cases of those who seek aid at the dispensary service.

This colored boy is seventeen years old and he says he has a sore on his penis

and also a "waxing kernal." Now take a good look at that sore. You will not have to put on your spectacles or make use of a magnifying glass. It is of mature age and can speak for itself. I imagine it saying "Gentlemen, I am an ulcerating initial lesion of syphilis, and my brother Bubo the boy calls a 'waxing kernal;' you may recognize us in various forms for we have possession and have come to breed."

This is called the Hunterian chancre, but Ambrose Paré discovered it one hundred years before John Hunter was born and was the first to give an accurate description of what is now known as the initial lesion of syphilis.

You will notice that it is located on the right side of a long prepuce. We have already reported several varieties of chancres, initial lesions. I have always in my mind's eye the four types as described from a clinical point of view by the greatest of all living syphilographers, Alfred Fournier, viz.:

First. The erosive desquamative chancre.

Second. The ex-ulcerative chancre.

Third. The ulcerative chancre.

Fourth. The papular chancre."

The erosive chancre consists simply of an epidermic epithelial desquamation, which merely denudes the derma without excavating it.

The ex-ulcerative chancre attacks the derma superficially, laying it bare, but not actually excavating.

The ulcerative chancre (whose acquaintance you have made today, is a speaking illustration), on the other hand, is hollow, excavated, jagged, an ulcer, in fact, but an ulcer at the expense of its own tissue.

Finally, the papular or elevated chancre is situated on a sort of raised plateau and forms a disk rising above and sharply defined from the surrounding tissues; it sometimes assumes the appearance of the *ulcus elevatum* described by some authors.

Three of the little girls that you have recently seen answer to the description of the fourth type of chancre, as described by Fournier. The boy tells us in his own language that he was exposed

about three weeks ago and that he does not remember running against a cart-wheel and that he has not been lifting any heavy logs. This is a classical case, for twenty-one days is the average stage of incubation. According to Fournier, the first act of the drama of syphilis is contamination. Then apparent repose of the organism. Nothing appreciable betrays the disease as yet. Second Act.—Production at the point where the virus has penetrated, and only here, of a lesion called initial, which, for the time, constitutes the only expression of the disease. Third Act.—Explosion of multiple and disseminated lesions beyond and outside of the seat of contamination.

The average time of incubation varies according to the experience of various authors. Diday found the mean duration fourteen days, and so on up to du Mauriac, who mentioned forty days. There are exceptions, as Fournier reports a case in which the stage of incubation was seventy days after exposure. Simonét and le Fort report three cases with a duration of ninety days. The late Dr. F. J. Bumstead told me of a number of cases in which the disease was acquired in Europe, and was developed in this country. I met a young man in Paris who acquired the disease in Portland, Maine, and it made its first manifestations after he had arrived in the capital of France.

The next thing to look for after the appearance of the initial lesion is enlargement and hardness of the lymphatic glands, nearest to the lesion. This is what is called a bubo, or lymphadenitis. There you see it with its cord-like chain of lymphatic vessels leading up to it. Jonathan Hutchinson says that the immoral glands are located above Poupart's ligament, as this one is. Enlarged glands do not always mean syphilis, but I do not remember ever having seen a case of the disease, in which there were not enlarged glands, especially of the epitrochlear. You may find enlarged lymphatic glands and especially below the ligament of Poupart, caused by over-exercise, as excess in dancing, swimming, etc., and also from a sore on

the foot or leg, of not a specific nature. We will not take up chancroidal buboes now, only to say that "Syphilis very rarely follows an open bubo." A true syphilitic bubo does not generally go on to suppuration.

Now we will disrobe the boy and we find a most abundant eruption over the chest and abdomen. This is known as the *erythema syphiliticum*, or the macular syphiloderm or syphilide. It is very slightly elevated above the surface of the skin. It varies in form and size. They are rounded hyperemic blotches. In the white race, the eruption is generally known as the roseola syphilide. As it does not itch, it sometimes comes and goes without being observed. Frequently you call the patient's attention to it.

Now our patient tells us that he suffers from headaches and rheumatism. The explosion has taken place and Fournier's drama of the third act of syphilis has commenced. In plain words the history of constitutional syphilis is complete and the disease is ripe for treatment.

Every one thinks he knows how to treat syphilis, especially those who fail to recognize it, when they see it. I regret to state that I have met disciples of Æsculapius who knew just about as much of the disease as Nicodemus did of the new birth.

I have hesitated about writing a paper on the treatment of syphilis, because every case has a history peculiar to itself, and requires a treatment adapted to that particular case. Some have the disease so lightly that I verily believe that they recover without any treatment at all. Other cases assume the most malignant type and go on from bad to worse, in spite of the most approved treatment.

Dr. A. E. Roussel, in the *Medical News*, May 20, 1893, reported a case that was of great interest to me. The patient was a man of exceedingly good record before he acquired the disease. He was forty years of age. Dr. Roussel had charge of the case from the time that the secondary symptoms first appeared. The patient, in spite of the em-

ployment of the very best methods of treatment, developed tertiary symptoms with most agonizing pains over each tibia. He also had necrosis of the hard palate as well as the alveolar processes of the superior maxillary bone and of nasal bones. In the eighth month of the disease, he was reduced from a weight of 190 to 140 pounds. He died a little over one year from the beginning of the disease.

This is a very uncommon history, I am glad to state, but I remember one somewhat similar that occurred here in Washington, about twenty-five years ago and which has never been reported. The man was a patient of one of our very best and noted physicians. This man lost his hard palate and it was with the greatest difficulty that you could understand his nasal twang. I remember that he had to be fed through a stomach tube. He was a married man, who paid dearly for only one licentious indulgence.

From an exalted position in a Presbyterian Assembly and holding an excellent social position he was reduced to an offensive mass of humanity, a

most pitiable object. I remember that his wife forgave him and clung to him until they both disappeared from view. I heard that he had returned to his native land on the other side of the Atlantic.

Most fortunately I have had no such cases. I know of no other disease that responds so promptly to the skillful administration of the proper remedies. Often the results of our treatment seem only a little short of the miraculous.

We will give this boy one-quarter of a grain doses of the protoiodide of mercury three times a day.

You notice that we have ordered an ointment containing calomel $\mathfrak{z}\text{i}$, unguent. zinci oxid. $\mathfrak{z}\text{i}$, to be applied to the initial lesion. Long ago we ceased to cauterize the chancre. There is no possible objection to removing some forms with the knife. I would recommend it but I did not believe that it shortens the disease a day. You might as well cut out a vaccination inoculation and expect to abort the secondary fever pustulation. The virus has already been absorbed and is there to do its work.

ARE DISPENSARIES REALLY ABUSED ?

By Chas. W. Hartwig, M. D.,

Surgeon to the Presbyterian Eye, Ear and Throat Charity Hospital.

THE subject under consideration is receiving widespread attention, not only here, but all over the entire civilized world. As this has been agitated so often before it will not be necessary to go into preliminaries, but simply to state facts. All are well aware that truths often highly offend, especially when driven home by facts. Our greatest hope is not in revolution but in rectifying a well-known existing and increasing evil. By education and in the teaching of morals to the public, to the false philanthropist who has ground down and made paupers of many. Who has suddenly become conscience stricken and by a payment in the form of tribute,

thinking thereby to soothe the awakening conscience.

Many say all that is needed or required of one is to give. What becomes of the gift is a matter of no concern. But I say it is of the greatest import to know what good it does and to what purpose it is used. After that knowledge then we have done our part, or else in trying to counteract a misfortune, we are committing a disastrous and widespread evil. Indiscriminate giving of charity pauperizes a community, converts it into liars and thieves, fills our jails, almshouses and reformatories and who after a while think it an accorded privilege which has been vested in them.

And why? Simply through the untiring efforts and encouragement of the thoughtless, uninitiated, the over-zealous and the misguided, or those trying to gain favor, honor and prestige.

Let me now cite a few illustrative instances only too true in dispensary life. A man will apply in a great hurry to be treated, as he cannot spare much time from his business. On being questioned he will merely state that he has been paying taxes for many years and because others better able to pay than himself have preceded him he point blank demands treatment. On being refused treatment the abuse heaped on the poor doctor's head is something awful, or possibly through lying, which is sometimes called cunning, manages to escape or evade answering the questions put to him, or answers them in an ambiguous way.

You can tell one who has traveled the circuit by the answers given; they seem to know what is wanted of them, and, of course, they reply to suit the emergency. Many a child is taught its A, B, C's in this special branch. We speak of schools for the education of pickpockets and thieves with a horror, but this fast growing and rapidly spreading evil is but lightly touched upon or not at all. In the one case the culprit is handled by moral, physical and civil law, but in the other is aided, abetted and fostered by the laity, clergy the doctor, and in fact by all. Which, if I may ask the question, is the worst, the former or the latter, or are they to be classed alike?

I remember a girl twelve years of age on being asked what her father did, promptly replied that her father had told her to tell the doctor that he was very poor and could not pay for treatment. This was given with a great deal of pride, showing how easily and readily the young mind can be moulded. At the Presbyterian Eye, Ear and Throat Charity Hospital a blank is given with questions regarding the inability to pay something for treatment; this blank is handed to the suspected individual to fill out. Some few leave the place in disgust, refusing to fill out

the same; others more brazen grit their teeth, put on a bold front and brave the storm, thinking by hook or crook to pass over the rapids and safely anchor with a few paltry dollars in their pockets for additional luxuries.

Wives unknown to their husbands, children to their parents, visit dispensaries enticed by some one who has been there before to save the fee of a visit to their physician and attend places of amusement or bedeck themselves with finery. To what must this eventually lead? A certain minister of the gospel said it was not necessary always to tell the truth; it would seem as if this was the sentiment of many of our dispensary patients. At the Presbyterian Dispensary with which I am connected, charity patients have carried prescriptions in their pockets for two or three years which they have never had filled. This goes to show that they have simply made a convenience of the physicians. Others have the audacity on being caught in the act to say that they do not wish free treatment, pretending not to know where skilled private treatment can be obtained, if they have taken the pains to find a free place with the words—"For the poor only."

It is certainly less trouble to seek a physician's private office. Every excursion from out of town brings a raft of well-to-do persons who seek free dispensaries to save from \$1.00 to \$25.00 or more, robbing their own physician and boldly swindling another. Some have just returned from the seashore or mountains, of which the fagged out doctor is oftentimes more in need than the patient. But does he get his just desert? When a doctor himself is ill do the hospitals cheerfully give him a room without paying for the privilege? Outsiders are plead with and begged to receive the hospitality and charity extended, with the remark that it will cost you absolutely nothing and especial courtesy will be showered upon them.

I will incidentally relate just such a case of a medical man after serving on the staff of one of our institutions for a number of years, who was taken ill and

remained in the same hospital for three days, while still a member of the staff. Immediately after his convalescence he was promptly handed a bill. This goes to show with what courtesy and hospitality the doctor is received by the management. Pray, compare the over-worked doctor with the spendthrift or drunken pauper who applies for free treatment. I leave out in comparison the deserving poor, who should at all times be received with open arms and welcomed. See how his work is followed up and appreciated and with what interest his many sacrifices are viewed.

It has been said that contributions are sought by some hospitals with the distinct understanding if a small amount of say one or two dollars is given they and their family need only to apply for free treatment which dare not be refused them whether it be worth \$1.00 or \$100. This may sound like a comedy farce to many, were it but so. But alas, it is only too true, as those who have investigated and weighed this question know only too well, but which some for policy sake dare not publicly acknowledge. How long is this burning question of the day going to last without any attempt being made on our part of setting things aright? Do not act the part of a coward and wait until a Napoleon miraculously springs up in our midst to conquer and guide you. But be a hero yourself, as opportunities (however golden) present themselves once only. It is therefore the act of wisdom to seize the opportunity. Are we justified in seeing free patients dressed in silks, satins and furs, wearing diamonds, gold watches and profusion of other jewelry, decorated with gold-rimmed spectacles, policemen, letter carriers, city and State officials in general, book-keepers, clerks, mechanics, etc., receiving a fair or good salary, habitual pleasure seekers and theater goers, those who spend their earnings in rum, etc.

How long will this inconsistency go unchecked? Can the medical man look on all this calmly and serenely without raising his voice? Just think for a moment; in Birmingham, England, 128,000 patients out of a population of 500,000

treated in hospitals and dispensaries. Dr. Boyes remarks: "It is a spectacle for the gods to laugh at—a body of learned men exerting their best efforts towards their own undoing." In our different Baltimore dispensaries I firmly believe that from 25 to 60 per cent. are unworthy recipients of charity. The only desire is that all of those who read on this subject will carefully and personally investigate, consider, think and reason out for themselves, get others interested and begin the teaching of morals. By the organization of associations and leading a joint and a personal crusade against those dispensaries disregarding and destroying the prospects of many physicians who are trying to earn an honorable living. A question many times asked, why waste your time and energies on such a minor and insignificant subject. A thing that is worth while tangling is certainly worth solving.

Can we apply our time and talents to a subject more practical and more profitable to all, than the present one that is undermining the medical profession and making medical existence almost unbearable and impossible, destroying the sense of honor, the pride and morality of the laity? What if we can check this calamity in its incipency before greater havoc is created? Would not that be a practical procedure, a great achievement and a noble deed? Can this be done without injury to those it is intended to benefit? I answer in the affirmative, providing a certain number of physicians and the laity will truly and conscientiously work in harmony. Let us prove that the greater part of the community are not paupers and are not willing to be made such. Your help is needed, mankind needs it and as there is only one epoch in a man's life, grasp the opportunity as time is short at best.

MENTAL FATIGUE AND EXERCISE.—Bum thinks that physical exercise after mental exertion is very bad practice and should be discouraged in the schools. The best thing is physical rest and mental rest in the form of sleep.

Correspondence.

"HYDROPHOBIA."

ANNAPOLIS, MD., January 11, 1897.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—Having read with profound sorrow of the deaths of four boys in Baltimore recently, who were bitten by a rabid dog, and whose treatment at the Pasteur Institute, New York, we have a right to assume was proper and scientific, what are we to do? Four deaths out of eight inoculated will cause the plain country doctor to halt, hesitate, delay, and in this particular disease prompt and immediate treatment is a necessity. I am not writing as a master or teacher upon this subject, but simply as an humble student who has culled the work of other men. My father, and my grandfather, thought and wrote upon this subject; their ideas and those of their cotemporaries have afforded much food for reflection, in view of the innumerable remedies suggested for this as yet incurable malady.

Dr. Joseph E. Muse of Cambridge, Md., suggested several generations ago that chlorine was probably the best antidote for the poison of snakes and mad dogs owing to its power of decomposing animal poisons. Professor Binz of Bonn has of late years made some interesting experiments, using solutions of chlorine in and around the wound.

Dr. Muse also wrote and recommended vapor baths, as suggested by Buisson, for the purpose of sweating the unknown poison out of the system. The *Medical Record* of January 9 mentions the Buisson or vapor bath treatment as a "New treatment for Hydrophobia;" this, of course, is an accident, as all of the readers of that journal must be aware of this old and tried remedy. I do not wish to be recorded as opposed to the Pasteur treatment; it may yet prove a god-send to the human race in the hands of scientific, earnest and faithful men.

I wish to be recorded as suggesting chlorine internally, externally and hypodermically in and around the wound as a reasonable, intelligent, sensible and

practical remedy. To this should be added the vapor or sweat bath, which was in use for similar conditions centuries before Buisson ever wrote or was born.

I am not opposed to the advancement of science, new methods and new remedies, but from a careful survey of the histories of the numerous cures for rabies, from scull-cap to actual cauterization and inoculation, I am forced to conclude that the remedy is to destroy the poison and eliminate it from the system. Observation, experience, reason, analogy, chemistry and high authority in medical science all teach that chlorine and its compounds will decompose and destroy the poison of insects, snakes and animals. Vapor baths have been used to eliminate poison from the human system from time when the memory of man knows not to the contrary, and since the cases are desperate and the two remedies simple and convenient, would it not be desirable to try them widely and thoroughly? Respectfully,

J. M. WORTHINGTON, M. D.

Medical Progress.

RECENT PROGRESS IN DERMATOLOGY

By T. C. Gilchrist,

M. R. C. S. (ENG.), L. S. A. (LOND. ENG.),
Associate in Dermatology, Johns Hopkins University, Clinical Professor of Dermatology at the Baltimore Medical College and at the Womans' Medical College of Baltimore.

SYPHILITIC REINFECTION.

In the *Journal of Cutaneous and Genito-Urinary Diseases*, Vol. xiv, No. 167, an interesting case of reinfection of syphilis is recorded by Dr. H. P. Collings. The patient was a man, twenty-eight years of age, who appears to have had syphilis eight years previously, with the usual symptoms of chancre followed by the macular eruption, alopecia and mucous patches in the mouth. He was treated for a period extending over two years.

Six years later the patient presented himself to Dr. Collings with another chancre, twenty-eight days after exposure, the scar of the first chancre still being visible. Six weeks after mucous

patches appeared around the anus, which was later followed by an eruption on the scalp. Mucous patches then formed in the mouth and cutaneous lesions broke out in the right buttock and left calf.

Collins believes this case to be a true example of reinfection of syphilis.

INTRA-UTERINE INFECTION FROM SYPHILIS.

Dr. Abner Post of Boston, in a paper on "Post-conceptional syphilis" read before the American Association of Genito-Urinary Surgeons (abstract in the *Journal of Cutaneous and Genito-Urinary Diseases*) remarked that opinions were divided regarding the existence of the possibility of intra-uterine infection of syphilis. He said that those who are against this view support their argument from the fact that there is no direct interchange of blood corpuscles from mother to fetus and that the contagion of syphilis is carried only by the blood corpuscles and not by the serum. But Dr. Post observes that the problem of infection of the fetus during intra-uterine life simplifies itself into the question whether pathogenic microbes may be transferred from the mother to the fetus or not. Recent investigations have shown that certain micro-organisms, *e. g.*, of pneumonia, of typhoid fever and also the bacterium coli commune, can pass the placenta and infect the fetus, and Dr. Post therefore infers that intra-uterine infection is not impossible in syphilis.

In order to prove that the mother has acquired syphilis, Post refers to the propositions laid down in Taylor's recent edition of his work, which are:

1. It must be shown that the father was free from syphilis at the time of conception.
2. The infection of the mother during pregnancy and her freedom from the disease must be proved beyond a doubt.
3. The child must have unmistakable lesions acquired without doubt before birth.

Dr. Post then reported a case which he regarded as one of post-conceptional syphilis. The following facts were observed by two physicians; the previous good health of the mother was known; the primary sore was seen during the

seventh month of pregnancy; the secondary eruption occurred two months later; the child was born apparently healthy, but a perfectly characteristic eruption and accompanying snuffles showed itself at the end of a week; the father confessed that he had acquired the disease outside of marital relations and transmitted it to his wife.

In the discussion which followed, Dr. Taylor remarked that since it was admitted that syphilis was due to a microbe which resides in the red blood corpuscles and is prevented from coming in contact with the fetus of the placenta, there is nothing to prevent the constant interchange of serum between mother and fetus and this carries with it the toxins of the disease.

Dr. P. A. Morrow did not uphold the view, which he considered rested on insufficient evidence, that the placenta acts as an absolute filter preventing contact of the syphilitic virus with the fetus. He also believed that almost all authorities recognized that the mother may receive infection from a syphilitic fetus. The theory that if the mother acquired syphilis after the sixth month, the product of conception was not liable to become infected, appears to have been somewhat changed according to results of more recent observations, since cases where the mother has contracted syphilis as late as the seventh or eighth month of pregnancy have been recorded.

Dr. White thought that one reason which may account for the rarity of post-conceptional syphilis was probably because the child under these circumstances underwent a species of vaccination, producing an immunity similar to that observed in the mother.

DIET IN SKIN DISEASE.

In a valuable paper read before the last meeting of the American Dermatological Association by Dr. J. C. White of Boston (abstract in the *Journal of Cutaneous and Genito-Urinary Diseases*), he discussed the effect of diet and alcohol upon the causation of and course of the eczematous affections and psoriasis. The disturbance produced by certain articles of food are both direct and indirect, the former being mostly fugitive

in character, *e. g.*, forms of erythema and urticaria, with or without apparent concomitant gastric disturbance, and the latter being produced by the impairment of general nutrition, through a too restricted selection or improper or badly prepared articles of food or those containing toxic properties. Overeating and dieting are both factors of such indirect disturbances.

He also remarked that there are many fallacies about specific articles; the more fixed and positive the belief about them, the more unfounded are they, as a rule. Dr. White then discussed the influence of diet on the causation of eczema.

1. In as far as inference could be drawn from rational dietaries. He here referred to Walter Smith's article on this subject, who says that the consumption of meat in England is 136 pounds per annum per head; in France it is only 46 pounds; whereas in certain nomadic tribes the diet is largely animal but in certain great sects it is largely vegetarian, while in many maritime nations it consists chiefly of fish, yet as far as is at present known, there is no difference in the prevalence or course of eczema among such nations.

2. With regard to the inference from individuals he said that men eat far more meat than women and children, yet eczema is the same in its prevalence and course in these cases and that even under the simplest and most uniform diet, as occurs in infancy, there is most liability and obstinacy of the disease.

3. With reference to the therapeutic test Dr. White observed that this was rarely, if ever, properly applied. Under his experience certain acid fruits easily provoked and often aggravated eczema and he tabooes articles which excite the nervous system and thus aggravate pruritus. He distinctly denied the efficacy of systems of diets devised for prevention or cure of such real or imaginary conditions.

Lastly and fourthly, in discussing the influence of alcohol he said that whole nations use far more than others, yet eczema was not more frequent than the

former. In childhood also and in many individuals total abstinence is observed and men took, as a rule, much more than women, yet there has not been any demonstration that the prevalence of eczema is affected by such extreme variations.

Dr. White, therefore, concludes that alcohol is not an important factor in the causation of eczema, but it has both a direct and indirect influence upon the course of the disease by setting up a specific dermatitis and of aggravating any existing one.

In the discussion which followed, Dr. Fordyce remarked that in infancy the tendency to eczema was largely due to delicacy of the skin at that period of life.

Dr. Jackson observed that as a general rule the more simple the diet could be made the sooner would the patient get well.

Dr. Duhring said that there was a vast difference between food as a cause of disease and food as an injurious factor in disease. He questions very much whether food could be regarded as a cause of eczema, except in rare cases, but it had often direct injurious influences upon the disease. With reference to alcohol it was highly injurious in many instances of eczema.

Both Dr. Dyer and Morrow thought that the eczema of infancy was often due to faulty diet or malassimilation. The food was either deficient in quantity or wanting in the proper elements of nutrition. The eczema was found to be markedly improved by correcting these faulty conditions.

Dr. Robinson, the President, said that the eczema of children could be divided into two classes, toxic and parasitic. In forms of indigestion, particularly stomach and small intestine fermentative dyspepsias, certain toxines are found. In his experience the sugars had been found to be particularly injurious and that was a common experience in children who were given cheap candy to eat. He concluded his remarks by saying that when inflammation had once arisen the diet must be considered an important factor in the management of the case.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, JANUARY 23, 1897.

VERY recently the result of the investigations of Dr. Charles Harrington as to the value of the various lithia *Malt Extracts*. waters was published in these columns. Since that time Dr. Harrington has reported in the *Boston Medical and Surgical Journal* what he considers to be hygienic, therapeutic, dietetic and economic facts concerning extracts of malt.

Malt extracts were according to him thick, honey-like substances extracted from malted barley at a temperature not exceeding 131°F., and brought to the proper consistence by concentration in vacuum pans, and they were supposed to be a powerful converter of starch. These were prescribed by the physician in small quantities and dispensed by the druggist. Their popularity and the benefits derived from their use has resulted in the manufacture of numerous liquid preparations which flood the market and which are not only prescribed by the physician and dispensed by the druggist but are bought outright by the patient from the druggist and

even from the grocer; and great singers, actors, professional beauties, strong men, oriental statesmen and many others are made to attribute their success to the use of this or that malt extract. These liquid preparations differ from the others in not being thick and syrupy and in being taken by the glassful and in containing alcohol.

Dr. Harrington has gleaned and deduced these facts from observation, but in order to still further carry out his work of investigation he bought in the open market twenty-one different brands of malt extract and examined them as to their composition, their diastatic power and their effects. They seem to be recommended for a great variety of troubles but most of them agree in being beneficial to nursing mothers. Nearly all are to be given in wineglassful doses, or even larger, before or after meals and on retiring. One claims to be a substitute for alcoholic drinks and itself contains more alcohol than ordinary beer.

Dr. Harrington, in analyzing the various lithia waters, refrained from calling the springs by name probably because there are comparatively few springs that claim to put out lithia water in its natural state, but in discussing these twenty-one malt extracts he boldly names them all and gives the analysis of each one. A careful reading of his article does not show any ill will towards the manufacturer of these products and he seems to have been fair in his work. There will doubtless be some replies refuting arguments and the whole discussion will probably be for the good of the physician and his patients.

Struck, as most persons are, with the resemblance of the malt extracts to ordinary beer, porter and ale, Dr. Harrington also analyzed a variety of these liquids and on comparison he found that nine of the malt extracts contained more alcohol than the weaker of the beers and six contained more alcohol than the stronger beers, four more than the ale and two even more alcohol than the porter. In every single one of the twenty-one samples, which include about all the malt extracts on the market, there was complete absence of diastase. Salicylic acid was present in many samples and most notably in one preparation said to be made in Germany, where heavy penalties are attached for the addition of salicylic acid except to those intended for export.

From a moral standpoint, if for no other reason, the dangers of using preparations containing alcohol which claim to be free from it are evident and drinking is encouraged and persons who would touch no liquor in any form innocently partake of these preparations with the idea that they are without alcohol.

Dr. Harrington says if diastase does act in the alimentary canal on the food, then these preparations which claim to contain this substance and do not, are useless, and if diastase is of no use at all, then these malt extracts are no better than the beers, porters and ales and are much more costly, as a comparison of their cost and bottle capacity will show.

Of course in this examination, which seems to have been made conscientiously, no reflection is cast on malt extracts which contain no alcohol and are rich in diastase or which contain even a small amount of alcohol provided it is freely acknowledged on the label. As a fact, it is hardly likely that any malt extract would keep without a small amount of alcohol present. If Dr. Harrington's work arouses a discussion and brings out the true value of the malt extracts it will have accomplished much good. His work sounds sincere and carries with it conviction.

THE abuse of the body is one of the most prolific sources of the physician's income. Accidents will still continue to happen and disease will still find its way to the most careful, but carelessness and ignorance are the great factors in promoting ill health. Indeed, there are many harmful occupations, many fatal trades and many injurious customs which familiarity has robbed of their terrors. The two especial members which are treated very badly by some persons are the feet and the eyes.

The feet are almost invariably cramped into shoes long enough, but too narrow and too pointed, so that the foot is driven forward and the toes fold one over the other and the nails grow in until torture at times is the result. If custom would allow the wearer to select his own foot covering according to his own comfort he would pick out a long, broad shoe which gave the toes room to spread out and move.

Veils may have their advantage in protecting the face against cold and the hair against

the wind, but the average veil is an abomination and not fit to be worn. Not only are the dots very injurious, but the meshes may be too fine. A physician once said that every dot on a woman's veil represented a fee in an oculist's pocket. Whether this be true or not, it is known that every dot on a veil coming before the eye causes a great strain and tires the muscles. Of course there are eyes that can stand the average strain and distant vision through this unnatural obstacle, but too many women have headaches and blurred vision from wearing veils, especially veils with obstructions on them.

If physicians have an especial work to do it is so to give advice that its worth will be felt. As long as it is the fashion to wear veils although injurious, foolish women will wear them even though realizing the harm they do, and as long as pointed and narrow shoes are the mode and make the feet look small just so long will such shoes be worn. Physicians have a duty to perform in giving advice and putting down, whenever opportunity offers, the abuse of these poor maligned members.

IN this issue Dr. Simon continues his articles on laboratory methods in making diagnoses and gives some simple and clear directions for examining the feces. This is one of the most difficult examinations to make because of the difficulty of obtaining proper specimens and the natural objections to making such examinations.

The amoeba coli is so important in dysentery and its complications that in all doubtful cases the feces should be taken to the laboratory or to the office and a specimen put under the microscope, as described by Dr. Simon. Many a long siege of amoebic dysentery, perhaps leading to liver abscess, has been allowed to run on when a simple diagnostic test with a high power of the microscope would have straightened out matters at once and would have led to rational treatment.

The modern physician cannot honestly treat his cases without the most modern tools and he who makes a slovenly diagnosis on the plea of inability to use the microscope or to understand modern methods, will sooner or later be found out and rated where he belongs. A snap diagnosis may sometimes hit but most often it does not and failure is the result.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 16, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		33
Phthisis Pulmonalis.....		27
Measles.....	2	
Whooping Cough.....	6	
Pseudo-membranous } Croup and Diphtheria. }	37	12
Mumps.....	9	
Scarlet fever.....	35	2
Varioloid.....		
Varicella.....	3	
Typhoid fever.....	8	2

Smallpox is almost epidemic in Cuba.

Pennsylvania is to have a hospital for consumptives in the country.

There are 2811 students at the University of Pennsylvania, 968 of whom are in the medical department.

At the last meeting of the State Board of Health, Dr. S. C. de Krafft of Cambridge was elected President.

A dispatch from Montevideo reports that Giuseppe Sanarelli has discovered the micro-organism of yellow fever.

Dr. Thomas H. Buckler has removed his office from 101 East Preston Street to 1301 Park Avenue, Baltimore.

Dr. J. N. Upshur of Richmond has been elected President of the Richmond Academy of Medicine and Surgery.

The Health Conference of the State and County Health Officers will be held on February 15 at the Faculty Hall.

At the recent annual meeting of the New York Academy of Medicine, Dr. Edward G. Janeway was elected President.

Dr. J. Taber Johnson of Washington has opened a maternity department in connection with his sanatorium, to which physicians may send obstetrical cases and still retain them under their charge.

The bubonic plague has spread with great rapidity in India and careful quarantine is kept up against its invasion into England.

Dr. Colby Cowherd, Gardenville, is dead. He was 69 years old and during the war was surgeon of the Thirteenth Virginia Regiment.

Dr. J. D. Iglehart has been commissioned assistant surgeon, with the rank of captain, for the Fifth Regiment, National Guard, in the place of Dr. Frank West, who resigned some time ago on account of ill-health.

The death is announced of Dr. Ellen C. Leggett of Flushing, Long Island. Dr. Leggett was 60 years old and was graduated from the Woman's Medical College of New York in 1873. She had an office in New York City.

Mr. J. Pierpont Morgan, the wealthy New York banker, has offered to erect a new building for the New York Lying-in Hospital at a cost of \$1,000,000, on condition that funds to carry on the work be raised. The board accepted his gift.

At the next meeting of the Medical Society of the Woman's Medical College, to be held at the College building, February 22, Dr. G. Milton Linthicum will read a paper on the "Treatment of Tuberculosis," the discussion to be opened by Dr. William B. Canfield.

Dr. Howard A. Kelly has finished his treatise on gynecology, on which he has been at work for several years past. Several other Baltimore physicians are said to be preparing books for the press. Among them are mentioned Drs. Ashby, Earle, John N. Mackenzie, Flexner, Barker and others.

Dr. Edward Kershner, formerly medical inspector in the United States navy, has been appointed by the commissioners of charities as chief of the medical staff of the Randall's Island Hospital. Since severing his connection with the navy Dr. Kershner has been Professor of Hygiene in the Post-Graduate School of this city.

The American Surgical Association have contributed a fund for the statue of the late Dr. Samuel D. Gross, which has just been cast in Paris. The statue will stand in the Smithsonian Grounds, near the Army Medical Museum at Washington, on a pedestal for which Congress gives \$1500. The unveiling of the statue will take place in May.

Book Reviews.

TWO HEALTH-SEEKERS IN SOUTHERN CALIFORNIA. By Wm. A. Edwards, M.D., and Beatrice Harraden. J. B. Lippincott Co., Philadelphia. 1897. 144 pp. \$1.00.

These authors have done the health-seeking public a good service by telling the whole and sober truth about a land and climate of so varied and perplexing features as California exhibits. "One traveler reports it to be all sunshine and flowers, another all fog and cold. Some complain of the dry desert winds, with their exciting electrical conditions, while others dwell upon the excessive humidity; when the probable truth is that the critic has not selected the proper environment and has passed by what he is seeking, which is, no doubt, within a few short miles."

Perhaps the best endorsement the reviewer can give this little book is the statement that he was utterly bewildered in his own experience for want of just such plain-spoken information and guidance as is here obtainable. California contains every variety of climate existing sociably side by side within easy driving distance or a day's horseback journey. It is worthless advice to order a patient there without definite suggestion as to locating either on the sea coast, in the valleys, or on the mountain ranges; and the peculiarities of an arid belt should also be understood in advance to prevent disappointment.

"The simple truth about California of the south is quite good enough. It is a fact that here is to be found the best yearly climate in the world." This book neither exaggerates its charms nor passes over its drawbacks.

THE *American Medico-Surgical Bulletin* of New York, published by Merck & Company, appears now on the 10th and 25th of each month. The form is smaller and the volume thicker, the type remaining the same. The hard times have compelled this change. The price is \$1.00 a year. Dr. R. G. Eccles, a graduate pharmacist and physician of Brooklyn, is the editor.

THE *Electro-Therapeutist* is a monthly journal of small size, published at Indianapolis under the editorship of Dr. Wm. L. Howe, M.D., Ph.D., and under the auspices of the National College of Electro-Therapeutics.

Current Editorial Comment.

TITLES OF ARTICLES.

Pediatrics.

WRITERS ought to be more careful in the selection of the titles of their articles. No one can read everything, hence the title, even if it do not tell the whole tale, at least should not be misleading.

HOLIDAYS.

Lancet.

MANY men know well what it is, after twelve months of continuous mental work, to feel brain-fagged, though physically quite well. Under such conditions work becomes drudgery and duties that should be light and pleasurable become burdensome. A person in such a case does not need rest in bed or a sea voyage, but some form of agreeable and diversified travel, either amid attractive scenery or places of antiquarian or historic interest. Under such circumstances the cultivation of some hobby is most helpful—such, for example, as the study of some painter's works or the investigation of some special type or period of architecture. To many of the more active and inquiring mind it is indispensable that a holiday should have some motive and purpose or else it will certainly fail of its desired object.

THE DOCTOR'S MISTAKE.

Medical Record.

IN all our relations with our patients, it is the safer and better rule to be more than cautious in our temptations to think aloud in their presence. A discreet general guards his line of possible retreat with as much care as that of attack, concluding that while it is quite bad enough to be defeated, it is still worse to be hopelessly bagged by the enemy. The older practitioner need not be told that the practice of his art is constantly beset by startling surprises. Patients not only get well who should die, but many die without ostensible scientific reasons. To reconcile these constantly recurring experiences makes him an ever-ready trimmer to circumstances and an adept diplomatist with shifting fortune. While apparently knowing everything, he finds it eminently fitting his actual position to know little and say less. The loophole of expediency is as essential to him as are his advice and prescription to his patient. He learns to be astonished at nothing and always on the lookout for the unexpected.

Publishers' Department.

Convention Calendar.

BALTIMORE.

BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.

BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.

CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.

GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.

MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.

MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.

THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.

THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.

THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.

MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.

UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.

MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.

MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.

WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.

WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

THE TREATMENT OF BEDSORES.—The occurrence of bedsores in bedridden patients, as for instance in the course of typhoid fever, during the treatment of certain fractures, or in paralytic subjects, is an event dreaded alike by physician and patient. As most of these ulcerations occur in old persons whose vitality is more or less reduced, it is easy to understand why these cases are so obstinate in yielding to treatment. Aside from scrupulous cleanliness, massage, removal of all pressure from the affected parts by suitable appliances, much can be done to secure the healing of the sore by topical applications of cicatrizing remedies. Although there is a host of agents of this kind, a selection can be readily made since there is none that can compare in efficiency, freedom from irritating and poisonous properties, and agreeableness and convenience of employment with Aristol.

This substance when applied to a sluggish, ulcerative surface, causes granulations to spring up with great rapidity while the discharge becomes less and loses its disagreeable odor. Owing to the lightness and bulkiness of the powder, a small quantity will suffice for a large surface, or Aristol may be employed in the form of an ointment. For bedsores occurring in the course of typhoid fever, Dr. C. Skinner of New Haven, Conn., employs the following treatment: They should be washed twice daily, with three per cent. carbolic acid solution, dusted with an antiseptic powder (Aristol is to be preferred) and a generous pad of absorbent cotton applied over the whole. By changing the position frequently so as to remove pressure from the affected parts, this treatment will usually be sufficient. If it is not, an air cushion will prove very serviceable. This same treatment will prove equally serviceable in cases of bedsores developing in aged persons suffering from fractures of the lower extremities.

Of course in conditions which confine the patient to bed for a long time everything should be done to prevent the formation of these ulcers by baths followed by an alcohol rub, and by gentle massage and sometimes electricity.

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Original Articles.

THE SCIENCE OF GENERATION AND ITS PHENOMENA.

By William F. Barclay, A. M., M. D.,
Pittsburg, Pa.

READ AT THE SIXTH SEMI-ANNUAL MEETING OF THE TRI-STATE MEDICAL ASSOCIATION OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA, AT CUMBERLAND, MD., DECEMBER 3, 1896.

"BUT I see another law in my members warring against the law in my mind." Divine and human laws clearly point out the great truth that generation is the foundation of human hope and despair and life is the inheritance of progenitors. Perfection is written upon nature's laws and everywhere the eye beholds nature's complete work, the thought is impressed in the words, "Consider the lilies of the field, how they grow; they toil not, neither do they spin, yet even Solomon, in all his glory, was not arrayed like one of these." "And God blessed them, God said unto them, Be fruitful and multiply and replenish the earth." In the beginning nature's work was complete in all its parts and perfection was written upon creation. "And God saw everything that he had made and behold it was very good."

Correct observation is a talent in man that should be cultivated as well as the power of description which enables him to form correct conclusions and impart them to others. The eye is brightened and the heart rejoices when the mind is illumined by the observation of nature's perfection. Infinite wisdom is portrayed in nature's handiwork and the heart rejoices and the mind perceives that there is a Divinity in all her works.

A disturbance in vital forces destroys proportions of parts, normal symmetry and natural blending of colors, so that the law of perfection is impaired. Disturbance and transplantation produce that which is deleterious to vital growth and strength. The student of animated nature will observe that the laws which prevail are uniform and the results of these unbroken laws are perfect.

Conditions and environment are equally distributed in the universe for the perfection of the distribution of animated nature. The highest and best results are obtainable under the careful observation of nature's productions when her laws are best preserved. We know that man has in his cruelty destroyed much that entered into his primary existence and that disease and decadence are the legitimate results. Life is impaired and abbreviated by the destruction of the conditions that enter into its causation and normal development. The earth and its productions are impaired and destroyed by the removal of the conditions provided for its sustenance and growth. The transgression of natural laws has impaired and in many instances destroyed the vital products of the earth. Animal life in different species has become almost extinct through man's wanton

cruelty and destruction. Humanity is appalled and the organization of laws for the protection of animal life and its preservation have been established.

It may be pertinent to remark that "Man's inhumanity to man makes countless thousands mourn." To the mind of the careful student of nature this truth is painfully and awfully impressed in the wanton destruction of animal life. The earth is robbed of her fulness and thereby God himself, for the earth and the fulness thereof are the Lord's. Seed time and harvest in different localities in our country are no more observed and the dwellers have abandoned these places. The earth is robbed of her forests and the benefits arising from their presence in different ways are denied to animated nature and the evil results are everywhere evident. The virgin soil with its forests and fountains of pure water and its atmosphere devoid of the causes that tend to disease and death is a matter of history. We read of the noblest and best specimens of our race co-existent with the youth of our country, but the conditions and environment of mankind at the present are entirely different and the effects upon the people only too apparent.

If the conditions of our forefathers were present and our educational advantages afforded it would be interesting to observe the results. When we consider that one-seventh of the entire population dies of tuberculosis and its effects, not to take into notice the evil consequences of syphilis and other maladies that devitalize man and render him liable to early decay and death, is it not time that we consider our vital existence ere our race perishes from off the earth? Intemperance in eating, drinking, and the indulgence inordinately of the passions with excesses of different kinds admonish the student of nature that we live in an age of excess and debauchery. The evil tendencies of the causes referred to are too apparent upon the moral and physical life of the youth of our age. The splendid moral character and physical organization of perfect manhood and womanhood are fast becoming extinct and the effects

upon posterity are too easily observed in the moral, physical and intellectual lives of our children.

The effects upon the uncivilized races of the non-observance of the laws of procreation and development pointed out are the rapid degeneration and extinction of the different tribes. Our American Indian tribes have been almost destroyed by the causes pointed out in this paper. Simplicity in our modes of living and the observance of the selection in marriage of suitable companions will do much to bring about the conditions conducive to better moral, physical, psychic and intellectual life. Nationalities are distinguished by the moral, physical and intellectual conditions of their subjects. The moral, religious, social, educational and other traits of character are the results of the influences of individuals and these characteristics conform to the national governments of the nations. Intellectual conditions distinguish the best types of physical growth and perfection when not distorted by the practices that are antagonistic to the development of normal growth. Perfection in physical and mental development is the condition that attains the highest achievements in human possibilities. Education betters the conditions of men and women, nevertheless characteristics that are innate cannot be obliterated. The congress of nations and their intercourse has done much to modify and in many instances better the moral, physical and intellectual conditions of their subjects. Life is in the abstract largely that which the individual elects that it should be, being governed entirely by that perfection in physical organization and development which is conducive to industry and attainment in that which the mind attempts to accomplish. Disease and abnormality are the conditions which impair and distort the individual and the results are transmissible to a considerable degree to posterity.

There is a law that pervades animated nature that impairs the results of procreation, which is fortunately modified by the different conditions that enter into the individuality of its subjects.

The continual multiplication of the elements that enter into life are not conducive to perfection in generations, but on the contrary a dissimilarity in first causes produces the best general results. Those nations and communities that continue in their own lines of reproduction become weak and distorted in physical and mental attainments. It is observable that in physical development there is uniformity of conformation and intelligence, as well as perfection of the senses. Travelers have observed that in nations there are characteristic defects which are certainly produced by innate causes in progenitors and their multiplication increases their organic results. It is established that races, communities and families can be recognized by their physical characteristics.

The continuation of the same lines in generation produce results in offspring that are uniform in physical and mental development and are gradually improved by lines of good tendencies. Education and habit have a benign influence in the modification of the law of heredity. Lines of good and evil propensities follow names in countries and communities, and the observation of good and evil that follows families should be classified as physical defects in organization producing lines of good and evil tendencies, which can be modified by good and bad blending in family lines. The degeneration of our American manhood and womanhood is largely obviated by the complexity of nationalities, represented in our population. The influences that correct deterioration of the different races are of the most benign character and the results are most salutary in the blending of the best family lines and characteristics of good or evil are the legitimate natural results of physical perfection or distortion of either good or bad personal development.

I cannot emphasize too forcibly the truth: "Do men gather grapes of thorns or figs of thistles?" The evil propensities and characteristics of human character are certainly caused by organic defects, and are just as certainly transmissible in anomalous ana-

tomical organization. Scientists have made some advances in the observations made upon physical organic defects that attend certain criminal actions and these defects are placed as mitigation theories in the defence of crimes against persons. It is a law that prevails in man and animals that physical characteristics and mental inclinations are transmissible and that avoidance of the evil lines in the multiplication of the race or species is of vital importance. The argument has been adduced that education and association modifies and eradicates evil conditions and their tendencies, but it has been too often demonstrated that the removal of offspring from all influences that might be prejudicial to those that are salutary and the propensities and characteristics of progenitors prevail.

Darwin has investigated the science of descent and has applied the laws that govern animal life in its varied forms and draws conclusions that are of inestimable value in the investigation of life and its legitimate results. The survival of the fittest is doubtless true, but a careful study of geology satisfies the mind of the careful student of natural science that our computations of time do not accord with the chronology of the earth's formations. In the chaotic ages the natural conditions existing at these periods were annihilated, yet the prehistoric evidences are not confirmative of a common origin of species. The capabilities of man are measured by a just consideration of his physical perfection and power of mental attainment. The best intellect may be hindered by imperfections in physical organization or distortion of the members of the body.

An analysis of the lives of one hundred men and women who were preëminent showed that the qualities that entered into their individualities were of the highest and best character in lines of genealogy that were in no way akin to each other. The opinion prevails that genius is innate and that it is anomalous, but careful study discovers that it is the result of natural laws in fixed lines of inheritance. The sum of ulti-

mate good accomplished by the brilliant intellects is so great in the education of the masses that a just estimate can not be computed neither can the influence upon posterity be estimated. It is interesting when we consider the extent to which evil in generation may blight and curse posterity, and the organic anomalous conditions that may be its results in degeneration. Professor Belman of the University of Bonn reports the case of a wanton and notorious drunkard that is most interesting on account of the continual line of offenders from an individual. Born 1740, died 1800. Her descendents were in number rather unusual—834, of whom 709 were traced from birth. The degenerations of those traced, 7 were convicted of murder; 76 of other crimes; 142 were professional beggars; 64 lived on charity; 181 women led disreputable lives. This family cost the German Government for maintenance and costs in almshouses and prisons \$1,250,000, or a little less than \$1,500 per capita. This would seem a remarkable report, but no doubt it is so on account of the care taken in tracing the records.

We seldom look into the cost of maintaining the degenerate, but a study of the reports of prisons, almshouses, reformatories, hospitals and other institutions established for the care of the degenerate, and poor, enables the mind to grasp in a limited manner the enormous sum that is yearly set over and contributed to defray the legitimate expenses incurred in providing for these classes. Were it not that the latter classes are in the minority the burden would become so great that it could not be defrayed and even now it is a serious economic problem. The conclusions arrived at as to the results of the union of individuals in generation are certainly in many instances correct and it may be observed that opportunity and environment have little power to modify organic conditions that are innate. Like conditions produce like results and that so-called freaks of nature are the consequences of the physical conditions that beget them. That preconceived desires influence the results of differential

unions is undeniable, but are at the same time governed by the lines that predominate in their progenitors.

The immediate and remote influences that prevail in animal life are traceable in a wonderful degree to the histories of lines alone that can explain that which seems incomprehensible. Humanity in its varied conditions is a most interesting vital study and the results that follow life in its complexities are the sum of good and evil physical organizations that enter into generation. "There's a divinity that shapes our ends, rough hew them how we will." It is not possible to change the phenomena that follow natural physical conditions in organic life. Civilization in man corresponds to domestication in animals. Domestication is beneficial in the improvement in species, as it is controlled by man in a careful study of the qualities which tend to improve and strengthen animal organization. Man in the constituents of his body does not materially differ from animals, yet the science of generation conclusively teaches the student of animated nature that groups and families have essential differences that cannot be reconciled with the theory of common origin. That the commingling of the elements in generation of two beings produce certain results that partake of the physical and mental characteristics of both as well as tribal predominance is the ultimate result of all human and animal procreation.

Theories prove little, but phenomena establish and confirm all things when correctly understood. When we study phenomena in animate and inanimate nature we readily comprehend the causes that enter into effects and their uniformity sets at rest much that has been uncertain in the discussion of natural science. That which is not tangible can only be considered in a study of its phenomena, and through a logical course of reasoning be made plain in the establishment of the truth. Characteristics, tastes and predisposition are innate and are the results of organic causes. The physiological harmony that pervades animated nature in the

production of the best results in vegetable and animal life is the best when the environments are favorable. The early period at which traits are observable teaches us that they are not the results of education, but organic perfections or defects. The inclination of the human mind to follow certain lines of thought and action are most remarkable and efforts at changing natural tendencies thwart and otherwise render the individual unsuitable for the successful prosecution of the work that may have been placed before him for his possibilities in human efforts.

The natural tendencies of individuals are apparent at a very early age, and it is not difficult to understand the adaptation and power to comprehend and accomplish that which is attempted and the certain satisfaction that follows the

best attainment. That congenital organic defects are transmissible is certainly established. The origin and development of the egg cell in the body of the mother and the fructifying influence of the seed of the father, thereby imbuing the offspring with the physical organic characteristics of both parents, affects all questions which the human mind has ever raised in regard to generation and its phenomena. That imperfections in mental organization and the results that prevail in lines of evil tendencies which can not be modified or eradicated by education or special training and influences adopted to produce correct mental action. There is imperfect physical organization of the brain, and spinal cord, and its action in psychical tendencies disturb and demoralize society.

NITROUS OXIDE IN MINOR SURGERY.

By John Turner, M. D.,

Prosector in Anatomy, University of Maryland; Physician to Children's Country Home, Catonsville, Md.

Two hundred years ago surgery and pain were closely allied. One presupposed the other, as doubt will usually presuppose evidence, pro or con. To reduce a dislocation of a joint, a half dozen stalwart, square-shouldered men were of necessity added as aids to the attending surgeon. Then pulling, prying and lifting were the only known means to a horrible end. Truly, at that time, indeed, was the treatment worse than the ailment. Surgery resulted in energy misspent to an unskilful end. To amputate, the patient was frequently placed in a stock, anchored and gagged, while the surgeon proceeded to cut and saw and stop the hemorrhage. The course of events compelled the sufferer to yield to his professional ill-treatment or die in agony.

A change came; suddenly the world whispered, "A new era." The chemist caused a revolution in the annals of surgery. Hope in the sufferers advanced a pace. In 1800, Sir Humphrey Davy, experimenting on nitrous oxide gas, discovered its anesthetic properties

and clearly described them, as they affected him. He suggested its employment where no great effusion of blood takes place. Sir James Y. Simpson first used in general practice ether for anesthesia. It was in 1847 that he broke the spell and startled the world by announcing the fact that a queer liquid (composed of ethyl oxide $\frac{3}{4}$, and alcohol, slightly diluted, $\frac{1}{4}$) would deaden the sensibilities and put asleep by nasal and oral inhalations. The world laughed at him. His enemies sneered when his name was mentioned because he had eclipsed them fairly and scientifically in their own profession.

The public generally were perplexed and afraid that their sleep would last forever. Nor was it so easy for the bravest heart even to lay prostrate and inhale a liquid which was new and which had the power of causing a dead feeling to creep over his frame. Suffering humanity at last succumbed. The consequence of which today we glorify in and honor his fame.

Let us not be misled in thinking that

anesthesia of any kind is so very recent in its advent. The general use of anesthetics is something quite modern in medicine, yet anesthetics were blindly used in very ancient times. Homer, the poet and scientist, referred to the effects of nepenthe as causing anesthesia. Hemp was used, according to Herodotus, to produce a kind of sleep in serious surgery. Pliny recorded particularly the use of mandragora as an anesthetic.

In the third century the Chinese being abreast of the times in scientific knowledge, used a peculiar preparation of hemp, by the influence of which insensibility was induced while surgical operations were performed. Mandrake, in sleeping draughts, was frequently mentioned by Shakespeare, the man ripe with learning of all description. A Polish king had an arm amputated while under the influence of some narcotic during the eighteenth century.

These were secret facts and considered merely as private scientific experiments. General practical use of anesthetics was not used until Simpson's time.

In 1844, Dr. Horace Wells, a dentist of Hartford, Connecticut, inhaled the fumes of nitrous oxide gas and had a tooth painlessly extracted. He then used it freely with his patients. This gas can be obtained by heating ammonium nitrate and is probably best collected over warm water. It is a slightly sweetish, colorless and inodorous gas. When inhaled it produces an intoxication peculiar to itself. The human frame in consequence is affected with nervous, erratic movements and mutterings. Often the patient laughs, cries, sings, fights and makes himself generally ridiculous.

In watching the twenty cases which have come under my observation, I have detected a slight weakness and flurry of the radial pulse, sometimes irregular (probably from fright). The fingers twitched and the hands became slightly edematous, as also did the lips and face generally become puffy. Four of the twenty became extremely blue in the face and about the eyelids and neck.

One case turned almost black in the face, yet her pulse was good, strong and regular. While under its influence, women sometimes are apt to make love to the physician; while, at other times, they imagine grave wrongs have been committed upon them during their sleep. It is useless to try to explain to them; for they will not listen. Then, the attendance of some of her friends or your own nurse's presence during the administration of the gas and the execution of the operation is paramount.

Nitrous oxide will intoxicate an ordinary patient in about two or five minutes. Its anesthetic effect lasts from two to five minutes, sufficiently long to operate on any minor tumor or abnormality. The cases recorded were such as tonsils clipped; adenoids removed; dead bone of the humeral shaft taken away; antrums opened and drained; abscesses opened; carbuncle of the neck opened and curetted; and small tumors of the neck, arm and back, all have been operated upon to my greatest satisfaction. Not one detained me more than twenty minutes time, counting the putting to sleep, operating and dressing the wound if it needs dressing. Time and pain, the horror of women and children, were saved.

It was by chance that I first used nitrous oxide. One hot July day during 1895, I was two hours trying to get my instrument into a young boy's mouth to clip his left tonsil. His mother got into a furious state of excitement and nervousness. The boy had two marked nervous chills, and, I must confess, my own frame of mind was far from normal. The repeated efforts fatigued patient, mother and physician. Suddenly, his mother suggested that he had to have a decayed tooth drawn and she would go to the dentist and return to my office the following day. I thought that doubtful; nor did I blame her.

Fortunately, it occurred to me, why not try my instrument while the boy was asleep in the dental chair. I did so, and with a most happy result. Later, profuse thanks came from that family in the pleasant form of all the throat cases they could send out to my office.

Since that one trial, I do not hesitate, after two unsuccessful trials, to proceed to take my patient to a dentist (the patient pays \$1.00 for administration of gas) and then I operate with ease and

dispatch. No pain, no dread, no nervousness, no loss of time or of patients experienced. In short, a happy and speedy termination of all ills is the result.

THE OLD PHRENOLOGY AND THE NEW.

By Lewellys F. Barker, M. D.,
Baltimore.

ABSTRACT OF REMARKS MADE BEFORE THE CLINICAL SOCIETY OF MARYLAND, NOVEMBER, 1896.

AFTER a few introductory remarks concerning the various systems of medicine which date their origin in the eighteenth century, the influence of the philosophy of Schelling upon the propagation of the three false doctrines of animal magnetism, homeopathy and phrenology was referred to. The life of Franz Joseph Gall, born in Tiefenbrunn in 1758, was briefly discussed, as well as the mode of origin and dissemination of phrenological views. The phrenologists believed (1) that the brain was the organ of the mind; (2) that this organ is made up of multiple organs; (3) that each mental capacity displayed by an individual depends upon its corresponding organ in the brain; and (4) that the form of the skull permits of deductions concerning the degree of development of the individual mental organs.

The organs of the mind were localized by Gall and his followers by means of a crude empiricism. Some ridiculous examples of the methods employed were related. Thus amateniveness was referred to the cerebellum because Gall noticed that the surface of the head over this organ was hot in a hysterical widow. Acquisitiveness was attributed to the portion of the brain beneath a prominence over the squamous suture noted by Gall in the pickpockets of his acquaintance. Gall attained to widespread fame and lucrative popularity before his death at Montrouge, near Paris, in 1828. He made some discoveries of permanent value regarding the anatomy and physiology of the brain. The speaker exhibited the large vol-

umes, including the atlas of the Anatomy and Physiology of the Brain, published by Gall and Spurzheim in 1810. A copy of this work is to be found in the Peabody Library.

Gall approached nearest the modern doctrines of localization when he described as the substratum of the mental activities the convolutions of the cerebral cortex, and when he asserted that individual convolutions are not of equal value for the intellectual life. An outline was given of the scientific investigations which, since the time of Gall, have proven the significance of the brain for the psychic phenomena and which in a way justify one in speaking of a new phrenology. The gradual development of medical ideas regarding aphasia and its cause was described, as well as the series of clinical and pathological observations which have led to the localization of the various sensory and motor areas in the cortex. The experiments of Fritsch and Hitzig (1870) with galvanic excitation of the cortex, of Ferrier (1873) with faradic stimulation, and of Munk on the extirpation of cortical areas; were briefly discussed. A study of the faculties possessed by a dog when deprived of its cerebral cortex, undertaken by Goltz, illustrated clearly the power and independence of the bodily instincts and taught us that a great part of the movements concerned in these can be called forth by bodily influences, entirely independent of the higher mental faculties.

The recent epoch-making researches of Flechsig of Leipzig concerning the medullation of the nerve-tracts within

the cerebrum were next taken up. Flechsig has shown that whereas in the new-born child the centers below the mid-brain are almost completely medullated, those higher up are almost entirely devoid of myelin and therefore presumably unripe and unready for functioning. The child at birth may therefore be likened to the dog of Goltz's experiments—to an animal without a cerebrum. In the absence of unsatisfied instincts and marked external stimuli it shows no signs of consciousness. The first of all the sensory regions of the cortex to ripen is that receiving impulses concerning the body itself, the impulses entering the central nervous system through the dorsal roots of the nerves of the spinal cord and medulla. As the child grows older the sensory paths connecting the special sense organs of the body with the cerebral cortex become medullated and prepared for function, one by one—the olfactory tract first—the auditory tract last. The cortical fields which correspond to the various sense-qualities are tolerably sharply circumscribed and widely separated from one another by areas of the cortex which do not ripen until a much later period. From the various sense-organs there develop motor tracts which pass from the cortex to the lower centers governing the muscles—so that the cerebral sense-organs are armed each with a band of motor fibers, by means of which the peripheral sense-organs may be properly adjusted for touching, seizing, feeling, smelling, tasting, hearing and seeing external objects. But only about one-third of the total area of the cortex of the cerebrum is connected in this direct way by means of centripetal and centrifugal fibers, with parts of the nervous system lower down. The other two-thirds of the cortex, much later to ripen, have no such direct peripheral sensory or motor connections. To them the higher intellectual manifestations, like memory, judgment, recognition and reflection, appear to be relegated. These areas, which include the main portions of the frontal lobes, the island of Reil on each side and large areas of the parietal, occipital and temporal lobes of

each hemisphere, receive from the adjacent sense-centers bands of fibers which gradually pass into them, thus affording the anatomical mechanism for the combining of sensations of different qualities with one another and for building these up into units of a higher order or of higher orders. They form, therefore, true centers of association in the cortex.

In addition to the anatomical evidence which points to the view that these association centers of Flechsig are of paramount importance for the intelligence of the individual, a considerable mass of clinical evidence has already been accumulated.

In certain diseases of the brain, especially in a number of cases of general paresis and in many cases of softening due to vascular disease, the opportunity has been afforded not only for the study of the phenomena manifested when the association-centers are diseased in the absence of disease of the primary sense-centers, but also it would appear for the observation of the symptoms which occur when one only of the association-centers is essentially involved. Thus where there has been double-sided disease of the frontal lobes, the symptoms manifested during life are referable to the loss of ideas by the individual concerning his own personality and the relations of himself to the happenings inside and outside his body, symptoms which agree very closely with the phenomena observed by Bianchi in higher apes after removal of the frontal lobes by operation. On the other hand, when the large posterior or parieto-occipital association centers are the ones mainly or solely involved the symptoms are very different. The individual may be clear regarding his own personality, but his mental concepts of the external world, the knowledge of these which can be put into words and the power of interpreting his external impressions by means of previous experiences may be lost.

The speaker then discussed briefly the phenomena presented when sense-areas alone are involved in pathological lesions—and also the symptoms which may appear when there is a combined

disease of sense-centers and association-centers. It will be the task of the neurologist in the future to attempt the analysis of the specific activities of the various cortical regions and to correlate these with the mental phenomena of man in health and in disease. The sense-center which receives the sensory impulses telling one of the condition of his body is known as the somaesthetic area; while sensations distinctly referable to the external world are received

by the visual sense area, the auditory sense area, the olfactory sense area, etc. The association-centers are named for the present anterior or frontal, middle or insular and posterior or parieto-occipital, though this division and nomenclature will doubtless be extended with advancing knowledge. After some references to the bearing of Flechsig's work upon psychology in general and upon medical philosophy, the remarks were concluded.

VAGINAL LIGATION OF THE UTERINE ARTERIES FOR UTERINE FIBROMATA.—Dr. Augustin H. Goelet, in a paper read before the New York Obstetrical Society (*American Gynecological and Obstetrical Journal*) maintains that it is essential to employ this operation only in carefully selected cases; for instance, in interstitial growths which do not extend above the level of the umbilicus and small subperitoneal growths which spring from the uterine wall below the fundus and where extensive adhesions with adjacent organs have not formed through which the tumor may receive nourishment. To secure the best result it is also essential to effect complete and permanent obliteration of the vessels (the uterine arteries) which supply the growth with nourishment by dividing them.

Simple ligation is not considered sufficient where the tissues at the base of the broad ligament are included in the ligature. As shrinkage from compression of the ligature occurs the ligature loosens and the circulation through the vessels is often restored. Ligating without completely isolating the vessel does not always rupture the internal coat, which is essential for complete obliteration.

In those cases of the author in which the arteries have been divided the result has always been satisfactory; that is, the hemorrhage has been permanently controlled, the other symptoms have subsided and the tumor has disappeared so far as could be determined by careful bimanual examination, the uterus reducing to normal size.

The chief advantages in favor of this operation in properly selected cases may be enumerated as follows, viz.:

It is devoid of risk, and the peritoneal cavity is not opened. It is easily done. It confines the patient to bed for two weeks only. It removes all symptoms produced by the tumor. It effects marked diminution in the size of the tumor which in some instances, at least, entirely disappears. It does not in any way interfere with a hysterectomy should it subsequently become necessary. It does not unsex the patient. The result is manifest within six months and the patient is not disabled nor inconvenienced by the operation.

* * *

HEREDITY OF CANCER. — Manichon (*British Medical Journal*) discusses the question of heredity in cancer. He bases his observations on 23 families observed by himself, in which several members were affected. In these 23 families there were 69 cases of cancer, distributed as follows: 57 in the stomach, 4 in the uterus, 3 in the breast, 3 in the rectum, 1 in the bladder, 1 in the liver. Of the 57 cases occurring in the stomach, 41 were in males, 16 in females. In 11 families the heredity was exclusively in the male line, in 5 in the female; in 6 families both sexes were equally affected. Moreover, 14 out of 22 families showed cancer in the stomach and of these the males were affected in 8. It appears, therefore, from this paper that heredity in cancer should be no longer doubtful. The author also points out that the special form of cancer is itself hereditary.

Correspondence.

STATE BOARD OF HEALTH.

CONSULATE OF THE UNITED STATES OF
AMERICA, HAVRE, FRANCE.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—I regret to notice in your editorial on "The State Board of Health," you speak sneeringly of my work while secretary of the Board; it should be remembered that when I became executive officer of the Board in 1875, there was not a sanitary law upon our statute books, except an old quarantine law passed in 1789. Every single sanitary law now existing was drafted by me, and passed through the legislature through my efforts, almost single handed. I think if you will take the trouble to examine my reports, especially the 7th Biennial Report, January, 1888, you will find that I did something more than draw the salary; and I did it, moreover, not altogether for the salary, for I was deeply interested in the work, and am still interested in sanitary matters, which I have been studying very closely during my stay in Europe, principally with the view of publishing a work on Practical Sanitation at some time in the future.

I read the JOURNALS which you kindly send me with much pleasure, and after reading them give them to my friend Dr. Powelwitz, the leading physician in Havre, who is very much interested in American medical literature.

Very truly yours,

C. W. CHANCELLOR, M. D.

HUMAN EMBRYOS WANTED.

Editor MARYLAND MEDICAL JOURNAL:

Dear Sir:—During the last ten years I have appealed to physicians from time to time to send me the human embryos which fell into their hands, and have in this way procured some very valuable specimens. These specimens have been cut into sections, and are now being modeled and studied very carefully. Yet a number of important stages are still wanting, and I therefore ask through

your columns that physicians send me any material which they may obtain.

The best method to preserve human ova is to place the unopened ovum, without handling, and as soon as possible, in strong alcohol. By this method the embryo within is well hardened for future microscopic study.

It is very injurious to wrap these delicate specimens in cotton before sending them by mail or express. A perfect method is to place the preserved specimen in a bottle filled completely with alcohol, thus imitating the condition of a *fetus in utero*. If there be no air or cotton in the bottle, it is almost impossible to injure the embryo by shaking it.

Very sincerely yours,

FRANKLIN P. MALL,

Professor of Anatomy,

Johns Hopkins University,

Baltimore, Md.

Medical Progress.

HYSTERICAL POLYURIA. — Most instances of simple polyuria or diabetes insipidus, says the *Medical Record*, belong to the class of hysterical polyurias. The term diabetes insipidus is destined to disappear from medical nosology. Hysterical polyuria exists either alone or associated with stigmata of hysteria, or with psychical or physical stigmata of degeneration. Chloruria would seem to be a constant sign of this form of polyuria. Suggestion holds the first place in diagnostic and therapeutic importance, but valerian and hydrotherapy also influence this condition.

* * *

DELIVERY IN THE MORIBUND. — Decio (*University Medical Magazine*) publishes a table of eighteen labors in which women apparently in a dying condition were delivered *per vias naturales*; of these, six children, including one of a pair of twins, seem to have lived. Five were born dead. The remainder expired soon after delivery. Turning after various methods was exclusively the means employed in all of the cases. In six the mothers were suffering from eclampsia;

of these five recovered, including the twin labor case. Three had cerebral apoplexy; of these two recovered. Two with advanced phthisis survived for a few weeks. Four were flooding from placenta previa; of these three were saved. One with pulmonary congestion recovered. One bleeding from an internal wound was saved, and one, injured by a fall, died.

Decio has also collected nineteen cases of Cesarean section performed upon dying women. All were graver cases than those in the table and all died. In thirteen cases the child was alive; one labor was of twins, making fourteen children saved. In only two was the os more or less open.

* *

OBSTINATE NEURALGIA TREATED BY PRESSURE.—Delorme (*Therapeutic Gazette*) presented to the Surgical Society a man who, because of violent neuralgia, had been subjected to amputation at the wrist. This brought no relief, and a second operation higher up was proposed. Delorme, however, treated him eight times by forcible pressure, giving entire relief. This pressure is applied by the thumb and finger. The most hyperesthetic areas are picked out and are pinched with all the force of the surgeon, who is relieved by a powerful assistant. Quenu holds that neurectomy is a serviceable procedure in these cases. Terrier points out that since the lesion is probably an ascending neuritis, secondary to infection, it may resist all forms of treatment, or may spontaneously recover. The infectious nature of these troubles, however, cannot be sustained, since many wounds which do not suppurate are thus complicated.

* *

THE TREATMENT OF VOMITING IN PHTHISIS.—Matthieu (*British Medical Journal*), after pointing out that as a rule little benefit is experienced by the use of opiates and counter-irritants in the treatment of vomiting after food in phthisis, these methods being directed to lessening cough, says that attention should really be paid to the gastric mucous membrane. He has obtained excellent results from small pieces of ice

given immediately after meals, and equal success from chloroform water and menthol, after food. Attacks of cough are thus lessened or suppressed and do not cause vomiting. Ferrand stated that vomiting was often due to exaggerated sensibility of the pharynx and he uses in such cases a solution of potassium bromide in glycerine to the throat, preferably before food.

* *

THE MECHANICAL TREATMENT OF INGROWN TOE-NAIL.—Dr. Henry Ling Taylor of New York recommends, in the *International Journal of Surgery*, the following method, modified from that advised by Mr. Masters, of England: A flat strip of silver, one-hundredth of an inch thick, one eighth of an inch wide, and one inch long, is bent into the shape of a fish-hook. The toe having been cleansed with peroxide of hydrogen and moistened with a solution of cocaine, the hook is inserted under the lateral edge of the nail so that the shank of the hook curves over the side of the toe and lies close to it. The greater the ulceration the less the pain in inserting the hook. It is retained in place by adhesive plaster or a bandage. The hook not only protects the flesh from the nail, but it exerts a lifting action on the nail. After a few hours the patient suffers no inconvenience from the hook, and in a few days the swelling subsides and the granulations become more healthy. It is well to wear the hook for several weeks after the tissues have healed.

* *

AERIAL CONVECTION OF TYPHOID FEVER.—An epidemic of fever at Rheims among the dragoons was first traced unmistakably to the dust stirred up by their evolutions and Uffelmann's experiments demonstrate (*The Journal*) that the dried typhoid bacillus, as also the cholera microbe, can be disseminated in the air, and thus alight in dust on articles of food. Similar experiences are reported from Belgium as the cause of the present slight epidemic at Tirlemont. These facts tend to show that the water supply is not always to blame in epidemics of typhoid fever.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, JANUARY 30, 1897.

It is an undeniable fact that discoveries in medicine which are of general interest have of late appeared in the daily press rather promptly and the accounts are on the whole very well given and much more true than was formerly the case. The great dailies of all cities, and especially the Sunday issues, devote a column or more each week to what is new in the realm of medical and sanitary science and probably this general spreading of special knowledge has its advantages as well as disadvantages.

The constant agitation of the dangers of tuberculosis and its spread and restriction have affected the sanitary laws of most civilized communities. New York City has just now taken the lead in its attempt to curb that dread disease. It cannot be said what the practical result of these stringent laws will be. For some time past the Baltimore Health Department has asked physicians to report all cases of tuberculosis coming to, their

knowledge, but this information was chiefly for statistical purposes, except in cases in which the patient himself desired care from the city.

In New York the endeavor will be made to segregate as far as possible all consumptives and the edict which has just gone forth from the Health Department of that city speaks highly in favor of consumptive hospitals. An attempt will also be made to restrict as far as possible the disgusting and dangerous habit of expectoration in cars and public places.

In the report of Dr. James F. McShane for the past year he dwells on the dangers of consumption and the spitting habit and suggests that ordinances be passed and enforced forbidding this habit; he also asks for increased facilities for disinfecting purposes and for the prevention of infectious diseases. He brings up again the need of an infectious hospital. He recommends dredging of the reservoirs, which is the next best thing to filtration. The Council Committee which has just been wasting money in a supposed investigation of the methods of water purification reports against filtration and also against dredging. The total number of deaths in 1896 was 9919, of which 1122 were from consumption. During the year 161,766 gallons of milk were examined and 3692 were spilled and the impression is that the quality of milk in Baltimore is improving, although a general inspection of herds and dairies supplying milk to the city of Baltimore and also a licensing of all milk venders is needed.

In the limits of Baltimore 304 stables were inspected and 172 were found in an unclean condition and were cleaned. The food inspectors condemned and destroyed last year 91,831 pounds of meat and many bakeries were cleaned. The vaccine physicians paid many thousands of visits. In the municipal laboratory under the charge of Drs. Stokes and Lehmann numerous specimens of water and milk were examined. The Bay View Trustees recommend many needed improvements in that institution and ask for more money. The work of the new board has been done with great diligence and they have accomplished much in a short time and against many obstacles.

In olden times politicians made money out of garbage disposal, but now since garbage incineration has been turned down after nu-

merous unnecessary visits by council committees to other cities, Baltimore has had submitted to it in a legitimate way a plan to sell all the garbage, the buyer to remove it, thus saving the city a large sum of money which formerly went to the politicians.

In matters pertaining to health due credit should be given to Health Commissioner McShane, who has served so long in his present position, but in matters of strict economy and municipal management based on business methods too much credit cannot be given to Mayor Hooper and his appointees. This is surely an era of sanitation and the public generally is learning gradually the value of the results of laboratory work, which cannot fail to be appreciated when the statistics of such a disease as diphtheria is studied.

WHEN a contagious disease once gains a foothold in an unclean country an epidemic is very sure to follow.

The Bubonic Plague. The disease which is commonly called bubonic plague, from the glandular swelling and supuration which occur, has been cutting down the inhabitants of India with fearful rapidity, but physicians who have studied the disease all agree that cleanliness and attention to sanitary laws are a sufficient safeguard, even when the disease is near at hand.

Since the studies of Kitasato and Yersin have been made public the exact nature of this disease is better understood and now the report comes, whether founded on fact or not, that Yersin has been using with great success a serum which has cured about ninety per cent. of cases on which it was used.

Like Asiatic cholera, the plague will never find a good culture medium in the enlightened countries where soap, water, light, heat and proper disinfectants are used. England, and even America, are on the lookout for the disease on incoming vessels, but little apprehension is felt that the bubonic plague could ever break out here.

Still the admission of one case of plague in this country would be sufficient cause for the greatest possible precautions and the most complete disinfection and destruction of everything that had been in contact with the case.

Bacteriology has done wonders in clearing up obscure diseases and in classifying them in such a way that their early diagnosis and

treatment can be begun at once and that with some chance of success.

THE sanitary conference which is announced for next month gives promise of great success as far as the attendance is concerned. *The State Board of Health.* Although it was stated that many delegates would have to bear their own expenses in transportation and living in Baltimore during this convention, almost every county and the larger cities of the State will be represented and the greatest interest is being taken in the work proposed.

If the State Board of Health accomplishes more in the future than has ever been done in the past, it should be remembered that the great development and advances in sanitary science and in all matters pertaining to hygiene give greater opportunities than ever before. Never in the history of the world has there been such universal interest shown in means to avoid disease and keep off contagion.

In the beginnings of the State Board of Health of Maryland Dr. Chancellor should be given due credit for the work that he accomplished almost single handed, as he so well points out in his letter. He not only had passed most of the laws governing the health of the State but his work in elevating the condition of the prisons and almshouses will probably never be forgotten. Dr. Chancellor has done much good and original work in hygiene and he still pursues his work in his capacity of consul at Havre, France, and is gathering material for a large work on his specialty.

To return to this sanitary conference, its main object is to consider the prevalence of typhoid fever in the State at certain seasons and the too frequent occurrence of diphtheria, and to try to remove the dense ignorance of the people generally through these delegates, on the dangers of disease and its prevention.

The physicians and health officers are generally men of intelligence and yet at the same time they are men who appreciate that they always have more to learn and do not resent instruction from the Health Board, but gladly welcome the secretary and follow his directions as far as the inhabitants can be compelled. The sanitary conference will accomplish great good.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 23, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....	"	
Pneumonia.....		22
Phthisis Pulmonalis.....		20
Measles.....	5	1
Whooping Cough.....	6	1
Pseudo-membranous Croup and Diphtheria. }	14	13
Mumps.....	5	
Scarlet fever.....	28	1
Varioloid.....		
Varicella.....		
Typhoid fever.....	1	2

The Hospital Saturday and Sunday Collection will be taken January 30 and 31.

Dr. Arthur D. Mansfield has resigned from the Presbyterian Eye, Ear and Throat Charity Hospital.

Dr. James D. Plunkett of Nashville has charge of the medical and surgical department of the Nashville Centennial Exposition to be held in that city in May.

Mr. Wm. F. Frick, who with his brother so liberally endowed the Frick Library, has given \$500 this year for the purchase of books, instead of the \$100 promised.

The Illinois courts have received such evidences of fraud in the management of the Illinois Health University, located at Chicago, that they have decided to revoke its charter.

Dr. W. T. Sedgwick, Chemist of the Massachusetts State Board of Health, was in Baltimore recently examining the system of milk inspection which is about to be adopted in Boston.

At the last meeting of the Section on Surgery of the Buffalo Academy of Medicine, Dr. J. M. T. Finney of Baltimore read, by invitation, a paper on the Surgical Treatment of Perforating Typhoid Ulcer.

A fire at Bellevue Hospital Medical College last week burnt the two upper floors of the building and did much damage. The records were all saved and there is no interruption in the course. The building will be replaced at once.

Dr. W. H. Spangler, a well-known physician of Bolivar, near Harper's Ferry, West Virginia, died last week, aged 55 years.

Among the various devices now being tried to relieve Guy's Hospital, London, of its financial difficulties, is that of raising a sufficient sum to permanently endow a bed in memory of the poet Keats, who served a short time there as a medical student.

Dr. Richard J. Hall, formerly of New York City and for the past eight years a resident of Santa Barbara, California, died last Sunday. Dr. Hall was a graduate of Princeton University and attained prominence as a surgeon in New York. He was the son of the Reverend John Hall, the well-known Presbyterian clergyman of New York.

The new women of France have recently held a congress where resolutions were adopted, among which was one to the effect that "all families must secure certificates of health from intended sons-in-law," so that the fair daughters of France may run no risk of contagious or hereditary maladies from the coming bridegrooms.

Dr. Moses A. Hopkinson, a retired dentist of Baltimore and father of Dr. B. Merrill Hopkinson, died last week in his seventy-third year. Dr. Hopkinson was born in Massachusetts and came here when quite young. He was probably one of the oldest dental graduates at the time of his death and was also a writer and scientist.

The Health Department of Minneapolis has ordered a thorough inspection of its public schools, with especial regard to their sanitary condition. It is the intention to perfect the drainage system where sewer and sewer connections can be obtained, and make such alterations as are indicated for improvements that will secure more abundant ventilation and light.

The Fifth Annual Meeting of the Tri-State Medical Society of Iowa, Illinois and Missouri will meet in St. Louis, April 6, 7 and 8, 1897. A large number of valuable papers will be read. Dr. Joseph Price of Philadelphia will hold the Surgical Clinic, Dr. James T. Whittaker of Cincinnati the Medical Clinic, and Dr. Dudley Reynolds, Ophthalmic Clinic. Dr. G. Frank Lydston of Chicago will entertain the members with an original story during one of the evening sessions.



THE UNIVERSITY HOSPITAL OF BALTIMORE.

THE UNIVERSITY HOSPITAL OF BALTIMORE.

AFTER nearly a century of service in its old quarters at Lombard and Greene Streets, the University Hospital is now rebuilding nearly the whole of its establishment. The new buildings, which occupy almost an acre of ground, have a frontage of 172 feet on Lombard Street and extend back to the alley known as King Street, where the Stable and Dead-House are situated. It has become the aim of the Faculty and Regents of the University to erect such a building as would be complete in every respect, perfectly ventilated and thoroughly convenient and sanitary and at the same time would double their capacity and efficiency. It was found that to do this at least \$70,000 would be required, which amount was accordingly guaranteed.

Along the Lombard Street front the buildings are to be 46 feet through and five stories high, including the basement, which is for the most part above ground, and will be used for the dispensary, as well as for the machinery, for heating, elevators, laundry and kitchen. A Loomis filter will purify all water, both for the 80 horse-power boiler and for general use in the hospital. A part of the first floor will be given up to the offices of the hospital and the remainder will be divided into private rooms for pay patients. The second floor will be entirely given up to private rooms and in the third and fourth floors, at the southeast corner, will be placed the amphitheater, which will accommodate about 350 students. There will be two private operating rooms and a number of microscope, examination and waiting rooms in connection with this. The remainder of the third and fourth floors will be given up to public wards, of which there will be nine, with a capacity of about 175 patients.

A complete system of ventilation will supply warm, fresh air to all parts of the building and carry off foul air through galvanized iron ducts concealed in the corridor ceilings. The plant will cost about \$10,000.

THE STYLE OF THE BUILDING.

Seeing that the old buildings of the University of Maryland, diagonally opposite, were in the Colonial or free classic style, the architect, Mr. William M. Ellicott, Jr., thought that it would be best to make the new buildings conform as far as possible to these. The basement and first story will be

treated as a base and from this to the fourth will spring pilasters and columns reaching to and carrying the main cornice of terra cotta. The fourth story is treated as an attic as in the Greek work. At the entrance on Lombard Street there will be Indiana lime-stone columns, with cornice above carrying an ornamental iron railing, and above this there will be four attached columns with a balcony and other ornaments. There will be near the corner of Greene Street a special entrance for students, which will pass through the first, second and third floors to the amphitheater above. The nurses' parlor on the first floor will be made an attractive feature, as well as the dining rooms for nurses and doctors in the basement.

Book Reviews.

SYSTEM OF DISEASES OF THE EYE. By American, British, Dutch, French, German and Spanish Authors. Edited by William F. Norris, A. M., M. D., and Charles A. Oliver, A. M., M. D., of Philadelphia. Volume I. Embryology, Anatomy and Physiology of the Eye. With Twenty-three Full-page Plates and Three Hundred and Sixty-two Text Illustrations. Philadelphia: J. B. Lippincott Company, 1896. Pp. xvii-7 to 670.

The prospectus of this work was given out some time ago, and its appearance has been looked for with considerable interest. The list of authors comprises many of the leading authorities in ophthalmology on both sides of the water. Volume I has now been issued. It contains chapters on the embryology, anatomy and physiology of the eye. Microscopical anatomy and congenital malformations are included under anatomy, the former by Professor Piersol of Philadelphia, the latter by William Lang and E. Treacher Collins of London. Under physiology, Edward Jackson of Philadelphia writes of the dioptries of the eye. J. McKeen Cattell of New York, of the perception light. Eugen Brodhun of Berlin, of binocular vision, etc., translated by Mrs. Christine Ladd Franklin of Baltimore. William Thomson of Philadelphia, of color perception; and Carl Mays of Heidelberg, of photo-chemistry of the retina. To give an adequate review of each subject would be impossible without unduly lengthening this notice. The part upon which we have dwelt with greatest interest is Dr. Piersol's article upon the microscopical anatomy. The au-

thor handles his subject with great skill and clearness, and illustrates it throughout with excellent, and in many instances new, plates. The anatomy of the retina is given according to recent developments and nomenclature in nerve anatomy. The lymph channels are well described. This chapter alone, with its beautiful and instructive illustrations, is worth the price of the book. The publisher's work is admirable. The index seems complete.

PRACTICAL DIAGNOSIS, THE USE OF SYMPTOMS IN THE DIAGNOSIS OF DISEASE. By Hobart Amory Hare, M. D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Laureate of the Medical Society of London, of the Royal Academy in Belgium, etc. In one octavo volume of 566 pages, with 191 engravings and 13 full-page colored plates. Philadelphia: Lea Brothers & Co. 1896.

Dr. Hare's originality shows itself in all his works and it is very marked in this excellent treatise on diagnosis. It is a record of symptoms from which the diagnosis of the case can be worked out and it is thus especially useful to the physician more than to the student. Thus, if a physician has a difficult case which shows one or more prominent symptoms, these symptoms may be studied in this book with perhaps the result of reaching the correct diagnosis.

The work is divided into four parts, preceded by an introduction on General Diagnostic Considerations. Part I treats of the Manifestation of Disease in Organs, and Part II of the Manifestation of Disease by Symptoms. The illustrations are abundant and the book is novel in style and practical and to be recommended.

THE Canadian Journal of Medicine and Surgery, Toronto, Canada. \$1.00 a year.

The editors are Drs. W. A. Young, J. J. Cassidy and E. Herbert Adams, who are assisted by a large and competent corps of collaborators. This number contains a variety of articles and matter of an interesting character and the whole is well printed.

The *New Yorker Medicinische Monatschrift* is not only much larger and better printed than last year, but it begins its ninth year as the official organ of the German Medical Society of New York. Dr. Alfred S. Michel is the new editor.

THE North Carolina Medical Journal is much improved in appearance with a tasteful cover and clear print. It will be published twice a month. Dr. Robert D. Jewell is the editor-in-chief, assisted by other physicians.

THE Albany Medical Annual also begins the new year in a new form and with a cover. It is the official organ of the Alumni Association of the Albany Medical College, which has selected as editors Drs. Andrew MacFarlane and J. Montgomery Mosher.

E. B. TREAT, Publisher, New York, announces the Fifteenth Annual Issue of the *International Medical Annual* for 1897, the work of forty physicians. The volume will contain 700 pages and the price is \$2.75.

REPRINTS, ETC., RECEIVED.

Notes on Inguino-Scrotal Cysts. By Thomas H. Manley, M. D. Reprint from the *Medical News*.

Acute Rheumatic Iritis; with Cases. By A. Britton Deynard, M. D. Reprint from the *Post-Graduate*.

Bathing and Boating Accidents. By Irving C. Rosse, A. M., M. D. Reprint from the *Journal of the American Medical Association*.

Die Behandlung der Lungentuberkulose mittels Ichthyol. By Dr. Moritz Cohn. Reprint from the *Deutsche Medicinische Wochenschrift*.

The Conservative Value of the Play Impulse. By Irving C. Rosse, A. M., M. D. Reprint from the *Boston Medical and Surgical Journal*.

Drainage versus Radical Operation in the Treatment of Large Pelvic Abscesses. By Charles P. Noble, M. D. Reprint from the *Journal of the American Medical Association*.

Quinsy; the Differential Diagnosis and Treatment. By J. Homer Coulter, A. M., M. D., Ph. D., Chicago. Reprint from the *Journal of the American Medical Association*.

Description of a few of the Rarer Complications occurring during and following Cataract Extraction. By Charles A. Oliver, A. M., M. D. Reprint from *Archives of Ophthalmology*.

PROGRESS IN MEDICAL SCIENCE.

ROOMS occupied by consumptives can be kept free from odor and contagious dust by frequently sprinkling the floors (particularly before sweeping) with Platt's Chlorides, diluted with 10 parts water; also keeping in the cuspidors Platt's Chlorides, diluted with 4 parts water.

THE PRESENT PREVALENCE OF LA GRIPPE.—The following suggestions will be of value at this season: The pains of acute influenza are something indescribable, especially when associated with high temperature. To relieve these with some preparation of opium is only to increase the cerebral congestion and aggravate the extreme prostration. Sharp, darting pains are no more severe than are the dull, heavy and persistent pains in the muscles and bones which so often obtain in this disease. Clinical reports verify the value of Antikamnia in controlling the neuralgic and muscular pains, as well as the fever. In fact, Antikamnia may now be called the *sine qua non* in the treatment of this disease and its troublesome sequelae. It seems hardly necessary to indicate the conditions, when the use of two such well-known drugs as Antikamnia and quinine will be serviceable, nor the advisability of always exhibiting Antikamnia and codeine in the treatment of the accompanying neurosis of the larynx, the irritable cough and bronchial affections. Relapses appear to be very common, and when they occur the manifestations are of a more severe nature than in the initial attack. Here the complications of a rheumatic type are commonly met and Antikamnia and salol will be found beneficial. Antikamnia may be obtained pure, also in combination with the above drugs in tablet form. Tablets mark the most approved form of medication, especially as they insure accuracy of dosage and protection against substitution. To secure celerity of effect, always instruct that tablets be crushed before taking.—*Medical Reprints.*

MY SUCCESS IN DIPHTHERIA.—Since losing our only child and first-born from diphtheria three years ago, I have been intensely interested in the treatment of that dread disease. In the hope of finding a reliable remedy, I

read all I could find on the subject. It was in this way that I reached the resolve to try the value of antitoxin. I at once secured two bottles and a syringe, but fully six months elapsed before the first opportunity for its employment presented itself. I have used antitoxin in five cases and am greatly pleased with the results. I am ready to join the most advanced observers in declaring antitoxin as a specific in uncomplicated diphtheria and that when administered early and in adequate doses, no death rates should be recorded. I am convinced that antitoxin in itself is perfectly innocuous and its injection in adequate doses entirely harmless. On the other hand, its immunizing and curative value in all instances where it is properly employed is so striking and so constant, that it seems to me it cannot fail to carry conviction to the mind of the physician giving it a fair trial. In all the cases in which I employed antitoxin, the history and clinical feature were such that no physician of experience could doubt the correctness of my diagnosis. Since using antitoxin I have found no instance of paralysis following an attack of diphtheria. And from the experience of others that paralysis never follows diphtheria when treated early with adequate doses of antitoxin. This only serves to show how perfect the antitoxin annuls the toxins in the system, upon which depend all the constitutional symptoms, as well as the distressing, oftentimes grave, sequelae and complications so frequent in diphtheria of yore. In a few instances I still find prejudice standing in the way of the victim of diphtheria receiving the only treatment that has in it hopes of life. Sometimes the prejudice is found in the patient. They will not submit to "a new-fangled remedy;" sometimes this prejudice is found in the physician. He does not believe in serum-therapy and will have nothing to do with it. But whether in parent or physician, the result is uniformly disastrous. In all my cases I employ Mulford's concentrated antitoxin, which I have found of uniform strength and always reliable. I do not as a rule communicate my experiences to medical journals. I do my utmost to find what will cure disease, then cling to it; I honestly believe that the physician who would refuse to use antitoxin and let the child die is guilty of gross neglect, if not of malpractice.—J. J. MCCOY, M. D., in the *Medical Fortnightly*.

MARYLAND MEDICAL JOURNAL

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Original Articles.

WHY IS ANTITOXINE A BONE OF CONTENTION IN THE THERAPEUTICS OF DIPHTHERIA?

By Augustus E. Bieser, M. D.,
New York.

READ BEFORE THE NEW YORK MEDICO-SURGICAL SOCIETY, MEETING HELD AT THE MADISON AVENUE
HOTEL, NEW YORK CITY, MONDAY, DECEMBER 7, 1896.

THIS topic of the antitoxine treatment of diphtheria recalls many topics in medicine in which partisans have disagreed, either through carelessness in observation or enthusiasm based upon a limited number of cases. To say that antitoxine is the best remedy for diphtheria today, without specifying the kind of diphtheria, is to make antitoxine encroach upon fields where it does not belong and places the medical profession in a false light before the world. A scientific classification of diphtheria would be the following :

1. True diphtheria, subdivided into—

(A) Pure or simple diphtheria caused by the action of the Klebs-Löffler bacillus and its toxine.

(B) Mixed or associated diphtheria, caused by —

(a) The association with the Klebs-Löffler bacillus of the small coccus (Brisou).

(b) The association with the Klebs-Löffler bacillus of staphylococci.

(c) The association with the Klebs-Löffler bacillus of streptococci.

2. Pseudo-diphtheria, including all those cases of false membrane in the throat, resembling diphtheria, caused by streptococci and staphylococci.

Not only do these varieties of diph-

theria differ bacteriologically, but also as to the effect they produce upon the organism. In simple diphtheria the Klebs-Löffler bacilli as a rule remain localized at or near the site of invasion in or upon the mucous membrane and its lymphatic connections and send their toxins into the circulation. Rarely do the bacilli themselves enter distant viscera, although it is possible for them to do so.

In mixed diphtheria it is the rule rather than the exception for the streptococci and staphylococci which accompany the Klebs-Löffler bacilli in the causation of the disease to get into the circulation and the viscera, into the lungs, spleen, kidneys, etc., where being left undisturbed they may lie dormant and elicit no symptoms referable to these organs, or being stirred up to pernicious activity by the attracting influences of antitoxine, for example, may cause havoc in each local sphere, as the case may be.

In false diphtheria, with which this paper has properly speaking nothing to do, the germs also get into the blood and viscera. Ever since I have used antitoxine in diphtheria as met with in tenement practice (and a very large percentage of such diphtheria constitutes

mixed infection) I have had to treat the kidneys and lungs more often than I should have wished. What is the explanation? Might it not be that the antitoxine being carried to the kidneys attracts the streptococci present there and acting as a favorable nidus for their development causes nephritis?

Furthermore, being carried to the lungs and attracting the germs present there, might its injection not explain the pseudo-malarial temperature curves that mark the course of a subacute or chronic pneumonia? Then if the patient has a constitution strong enough to run the gauntlet of both the diphtheritic toxine and the antitoxine it may very well happen that he will succumb to heart failure from pulmonary edema. It is right here in mixed infection as met with in tenement practice, in which the bacteriological examinations, at least as regards the presence of Klebs-Löffler bacilli, are very often negative.

It is just here in this variety of diphtheria in which antitoxine does not seem to be able to hold its own, but on the contrary seems to be losing former adherents. It is just here in this visceral diphtheria as compared with the superficial diphtheria, cases which are diphtheritic in every respect except in the presence of the Klebs-Löffler bacillus, that antitoxine furnishes the bone of contention in the treatment of the disease.

The term "visceral diphtheria" here needs some qualification. It is visceral in the sense that the viscera are affected; diphtheritic in the sense that a false membrane is present in the throat. I do not deny antitoxine's efficacy in simple Klebs-Löffler diphtheria, and especially in the laryngeal type of the disease. There is too much testimony in its favor by the most eminent intubators of Europe and America as to its value in the laryngeal form for me to attempt denial. It is effectual here because all it has to do after the tube has removed the stenosis is to neutralize the toxine generated into the blood; this neutralization seems to be accomplished perfectly in simple diphtheria by the antitoxine. What I object to is

the indiscriminate employment of the remedy in every case, irrespective of what the patient's condition may be; irrespective of what the nature of his vital functions, and especially the function of secretion and excretion, may be.

For example, I would not inject antitoxine when there was any marked renal insufficiency; marked renal insufficiency in a case of diphtheria would, to my mind, indicate that I probably had mixed diphtheria with streptococci probably present in the kidneys causing the disturbance of the kidney function to deal with. Here I would feel that I hampered the vital function of urinary secretion and excretion by injecting antitoxine.

It has been my experience, which coincides with that of other physicians, that 95 per cent. of tonsillar or naso-pharyngeal diphtherias get well, it being the laryngeal cases that swell the mortality. Of 26 cases of tonsillar or naso-pharyngeal diphtheria treated by me this year without antitoxine, Klebs-Löffler bacilli being present in 10 of them, all recovered. Of 14 cases treated with antitoxine, one died. But, say the antitoxine advocates, it is in laryngeal diphtheria of the most fatal form of the disease that antitoxine does so well. Granted, in simple diphtheria of the larynx, but is it so efficacious a remedy in cases of secondary involvement of the larynx by false membrane in mixed diphtheria?

In simple diphtheria of the larynx we must remember that after the immediate danger (suffocation) has been removed we have practically only the toxine discharge into the blood from the mucous membrane to fight; this toxine, it appears, can be pretty effectually neutralized by the antitoxine, giving intubators who have mostly pure laryngeal diphtheria to deal with a splendid intubation record. But how does the matter stand with those unfortunates who have mostly laryngeal diphtheria of a mixed type to deal with, when very often the health board reports as regards the presence of Klebs-Löffler bacilli are negative? Such intubators

show the bad effects of antitoxine in their records.

To the uninitiated an appeal to statistics carries with it the idea of mathematical accuracy, perfect certainty and an assurance against fraud or misrepresentation; but the initiated know that statistics are either perfectly reliable or absolutely misleading in accordance with the method of their preparation. From May, 1895, to date, I have had 14 operative cases, including 3 pseudo-diphtherias to report treated without antitoxine, with 5 recoveries, mortality 64.2 per cent.; 7 operative cases treated with antitoxine (given in four instances on the first and second days) with 72 per cent. mortality, 2 cases only recovering. Excluding the false diphtherias (measles, scarlet fever, influenza) from the first list, making the character of the cases similar in both lists, I get $45\frac{5}{9}$ per cent. recovery without and $28\frac{2}{7}$ per cent. recovery with antitoxine.

If antitoxine under the worst possible conditions shows more favorable results than any other plan of treatment, measured by the same conditions, or better yet, when antitoxine thus handicapped compares favorably with any other plan of treatment, it is entitled to be called the remedy *par excellence* in diphtheria; otherwise not.

If antitoxine is placed under the disadvantages which confront, for example, the stimulating and supporting treatment of diphtheria, or the mercurial treatment of diphtheria, such disadvantages specifically enumerated being—

1. The likelihood of the immediate death of the patient.

2. The presence of measles, scarlet fever, influenza, etc., as complications of pseudo-diphtheria.

3. The knowledge that our patient has been sick from five to ten days before we see the patient.

4. The almost positive assurance from the clinical history of the case that it is one not of pure, but of mixed, diphtheria.

Will antitoxine, all things considered, furnish in such a contingency as fair a record as the mercurial, stimulating and supporting treatment of diphtheria?

Summary.—Inject antitoxine only in cases seen early or in cases which assume the character, both bacteriologically and clinically, of the simple Klebs-Löffler diphtheria. In cases seen late, or in cases in which from the severity of the clinical symptoms, and especially when the kidneys are working badly, you are almost positive that there is mixed infection, it is the safer plan to discard antitoxine altogether.

ANTITOXINE IN DIPHTHERIA.

By Herman M. Biggs, M. D.,

New York.

REMARKS MADE AT THE MEETING OF THE NEW YORK MEDICO-SURGICAL SOCIETY, HELD AT THE MADISON AVENUE HOTEL, NEW YORK CITY, MONDAY, DECEMBER 7, 1896.

DR. HERMAN M. BIGGS said that first he wanted to make one or two corrections in regard to Dr. Sims Woodhead's horses (referred to by Dr. Winters) that showed such striking reaction. It was not diphtheria antitoxine which was used, but diphtheria toxine. It is quite a different matter whether we use a substance which in itself is absolutely harmless, or whether we use a substance one of the most virulent of known poisons. There is no mention about the variation in resistance to poisons and

there is nothing known in nature to compare in virulence with bacterial poisons.

There was also an error in regard to the Boston opinions as to the strength of preparations of antitoxine, as the Massachusetts Health Board, in testing antitoxine, had reported numerous specimens of serum that contain from 200 to 400 units in each cubic centimeter.

Regarding the dangers attending the use of antitoxine, there was not sufficient evidence to show that in one sin-

gle instance, out of probably now between 500,000 and 750,000 injections, was death or serious permanent injury produced by antitoxine.

Regarding Dr. Bieser's cases, there was nothing said as to when or how they were treated. Out of 7 cases, 4 of them are treated after they have been sick one week or longer. Of the 3 remaining cases, 2 recovered and 1 died, and the one that died, died 22 hours after the intubation and probably antitoxine was administered at the same time. There is no convincing evidence to show that antitoxine does any good in cases five days ill. Statistics are absolutely valueless unless they are taken in consideration with the time of administration.

The evidence as to the value of antitoxine in the treatment of diphtheria may be considered under the following heads:

1. The experimental evidence which, so far as animals are concerned, is absolutely conclusive, as to the specific influence of antitoxine in neutralizing the toxic effects of the bacteriological poison.

2. The results shown in large collections of cases of diphtheria treated by different observers in private practice and in hospitals throughout the world.

3. The influence on the absolute mortality in the hospitals in the cities since the introduction of antitoxine, as compared with the previous statistics.

Dr. Biggs had prepared a number of charts illustrating these cases and the results shown were as follows: The collection comprised 24,768 cases, of which about 15,000 were hospital cases and 9000 were treated in private practice. The mortality was about 19 per cent. in the hospital series and 10 per cent. in those treated in private practice. The mortality in the whole collection was about 16 per cent.

The average previous mortality in this series as given by the reporters varied between 30 and 40 per cent., when the lowest statement was taken in the reports. In many instances the mortality, especially in hospital cases, exceeded 50 per cent. The average reduction as shown in the whole series,

about 25,000 cases, exceeded 50 per cent.

In certain of these reports certain groups of cases were given in which antitoxine was used in treatment immediately before, at the same time, or immediately after the treatment of other groups by other methods and the comparative results were given. In these cases definite statements of results were given. In about 8000 hospital cases treated with antitoxine the mortality was 21 per cent. and in 9000 cases without antitoxine mortality was 36 per cent. These cases were of the same kind and were under exactly identical conditions. In private practice 3100 were treated with antitoxine with 13 per cent. mortality; without antitoxine, 40 per cent. mortality.

A certain proportion of the cases were grouped according to the day of disease on which antitoxine was administered; about 10,000 cases, mortality 16.1 per cent.; first day, 1415 cases, 3.5 per cent.; second day, 2640 cases, 8 per cent.; third day, 2340 cases, 12.8 per cent.; fourth day, 1458 cases, 23.6 per cent.; fifth day and after, 1912 cases, about 35 per cent.

As we all know, the laryngeal cases are the most fatal. In this group of cases they have been separated into those operated on and those not, a total of 15,000 cases in this group, with a mortality of 16 per cent. Operated upon, about 3000. Thirteen hundred and fifty-five tracheotomied, 1675 intubated; mortality in tracheotomy 42 per cent., in intubation, 31 per cent. Lowest mortality in any considerable group of intubation cases reported, 55 per cent. In any large group of operative cases the lowest mortality, 70 per cent. Average in hospital from 70 to 80 per cent.

The age of the patient is very important in the mortality in diphtheria. It is very high in young children and proportionately less in adults. In a certain proportion of the cases they were examined in relation to age; about 1500 under 2 years were treated with antitoxine; mortality, 31½ per cent. Baginsky puts the mortality under 2 years of age

at 63.5 per cent.; 2 to 5, mortality with antitoxine was 20.7 per cent.; previous to the use of antitoxine, 45 per cent.; 5 to 10, 14 per cent.; previously, 24 per cent.; over 10, 6.9 per cent.; previously, 14 per cent.

The criticism is constantly made, "That is all very well, but percentage mortalities do not count anything. Statistics can be made to show anything you like, depending upon what you want to show." One thing does show; that is the number of total deaths. Antitoxine has been largely employed and we should see some results in the total deaths occurring in hospitals, cities and countries—this is not a question of percentages. It is not a question of mild or severe cases, or laryngeal cases, or non-laryngeal. It is a question of the total deaths occurring from this disease. These data are taken from the official reports of the Municipal Council of Paris and of the Imperial Board of Health of Germany. The deaths from diphtheria and croup in Paris in 1889 were 1890; 1890, 1859; 1891, 1531; 1892, 1557; 1893, 1266. In 1894 antitoxine came into use. In the first half of 1894, deaths from diphtheria were 734.

The mortality was considerably higher than in 1893. In the last half of 1894, after Roux's paper at Buda-Pesth, antitoxine came into very general use in Paris and the mortality dropped to 271, or much less than one-half. The total mortality for the year 1894 was 1009. In 1895 the mortality was 440. The data available go back ten years and there had never been a year in which the mortality was less than 1200. In 1895, with antitoxine, it drops to 440. For the first half of 1896 the mortality was higher—320.

In Berlin antitoxine came into use somewhat later than in Paris. In Paris it was taken up after Roux's paper as a source of national congratulation and the French government established immediate control over its preparation. The *Figaro* raised a large subscription for its free administration and for its free use and it was generally employed throughout Paris almost immediately.

In Berlin it did not come into use

generally until the middle of 1895, although it was used largely in the hospitals in the early part of 1895. This chart shows the mortality for different years in Berlin previous. You see it runs from 1078 in 1891 to 1643 in 1893. In 1895, with half a year's use, it dropped to 996, and for the first half of 1896 to 294, which is a little more than one-half of the lowest mortality which has been recorded before. These are the absolute deaths.

Another method of considering this matter is with reference to the mortality in the hospitals for these years—the number of cases, the absolute number of deaths and the percentage of deaths. The hospital mortality in Europe from diphtheria has always been much higher than here.

In 1893 the number of cases treated in the Paris hospitals was: Cases 1882, deaths 986, mortality 51 per cent. In 1894 (the last four months of the year antitoxine was employed) the absolute number of deaths dropped to 837, while the number of cases increased to 2355, mortality 35.5 per cent. In 1895 the absolute number of deaths dropped sharply to less than one-half and the per cent. of mortality $13\frac{6}{10}$. There were—cases 2644, deaths 363, mortality 13.6 per cent. In 1893, first half—cases 1298, absolute mortality 199, rate 15.3 per cent.

Antitoxine was introduced into the Berlin hospitals with the beginning of the year 1895. In 1893—cases 2570, deaths 1132, mortality 44 per cent. In 1894 data are wanting. In 1895 there were 3144 cases. The absolute number of deaths (493) dropped one-half per cent.; first half of 1896, 1100 cases; absolute mortality 151; percentage $13\frac{6}{10}$. The mortality of 1893 was not high in either Paris or Berlin.

In 1895 the mortality in New York City had dropped nearly 1000, although the actual number of cases has materially increased. In 1896 the mortality has dropped still more. It will be this year about 1800—always with a still larger number of cases. This year the number of cases will be between 10,000 and 11,000.

As bearing on this point of view I have here the number of deaths per 100,000 in Berlin and Paris. It dropped considerably in 1894, and the drop takes place in conjunction with the introduction of antitoxine. It does not take place at the same time in different cities. It took place in different cities and at different times when antitoxine came into use. Kossel collected the deaths from reports of the Imperial Board of Health of Germany, the absolute number of deaths for all cities in Germany with a population greater than 15,000. The yearly deaths run from 10,400 up to 13,790, and this shows the deaths per 100,000 of the population. It was 108 in 1889; 105 in 1890; 84 in 1891; 97 in 1892; 101 in 1894. Suddenly in 1895 it drops to 53, exactly one-half of what the average mortality per 100,000 of population had been for the previous six years.

The same thing has been done in France, with exactly the same results. Dr. Mona, Director of the Public Health Department of France, collected deaths from diphtheria and croup in all French cities with over 20,000 inhabitants. For 6 years the average was 2627 deaths the first 6 months of the year. In 1895 for the same period there were 904 deaths, or a little more than one-third the average for the previous six years.

What I wish to bring out is that it does not make any difference how you state things; it does not make any difference how you twist figures. When you take large series of cases as derived from reports all over the world, the re-

sults are absolutely the same, whether we consider them from the percentage of mortality without reference to cases in hospitals or in private practice; whether we consider them as to percentage mortality or absolute mortality in cities or in countries, as Berlin and Germany, or Paris and France, the actual result is the same.

If we consider cases with reference to age or date of disease, it matters not what view you take, the result is the same, *i. e.*, there has been a diminution of mortality in diphtheria from the use of antitoxine of at least one-half and in some cases to one-fourth what it previously was. It seems so utterly futile to talk about the opinions of one man or another man when you are dealing with data which are so large as are now available. The fact is, we have the best clinical observers of Europe, the most distinguished men, the most distinguished authors, all unanimous that antitoxine has reduced the mortality from diphtheria at least one-half.

You have then in considering the value of antitoxine first the most careful series of experimental investigations that have ever been produced in any disease pointing to this conclusion. We have, second, a collection of 25,000 observations made from the reports of over 150 observers, with none of them less than ten cases and most of them over 50 cases, with the absolute mortality and the percentage of mortality reduced in every instance to about one-half, and we have finally the verdict of the best observers in medicine throughout the civilized world.

ECLAMPSIA AND THE MILK TREATMENT.

FERRÉ (*British Medical Journal*) insists that the milk treatment is most efficient from a prophylactic point of view, though it does not necessarily cause the other alarming symptoms, besides the fits, to vanish. He has never seen fits in a patient subjected for over a week to milk diet, nor any other trouble of a toxic origin. The alleged disappearance of albuminuria, on the

other hand, does not necessarily occur. He speaks with equal decision on this point, declaring that he has never seen so much as an appreciable diminution of albumen, even after prolonged treatment by milk diet. Ferré says the same of the edema; this treatment seems to have no effect on it. He emphasizes the above facts because he is aware how some obstetricians have very naturally given up milk diet on account of persistence of albuminuria and edema.

THE SCIENCE OF GENERATION AND ITS PHENOMENA.

By William F. Barclay, A. M., M. D.,
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READ AT THE SIXTH SEMI-ANNUAL MEETING OF THE TRI-STATE MEDICAL ASSOCIATION OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA, AT CUMBERLAND, MD., DECEMBER 3, 1896.

(Concluded from last week.)

THE tendencies of individuals in sanity are uniform and correspond to fixed lines in human thought and action. Intelligence and moral convictions do not overcome organic defect and the results which attend anomalous organization. Virtue and good tendencies do not entitle the individual to special commendable consideration, neither does obligation rest upon those persons who have defective mental organizations. A study of over nine hundred convicts showed that ninety-five per cent. continued in the lines of evil conduct and action which had placed them beyond the pale of lawful society. The remaining five per cent. showed that a small percentage were innocently incarcerated, and the remainder were accessories after or before the facts. Courts understand these penal institution reports and are governed in their administration of justice accordingly. First offences raise a question of previous character and if a good reputation is established by evidence it is a mitigation in sentences. Second and subsequent offences receive the full penalties attached to the offences committed. It was demonstrated after careful inquiry that only a small number of the convicts had reproduced themselves in offspring, and it can be established that criminals intentionally or on account of penal servitude do not enter into the generation of the human race to any considerable extent. It would be a great advantage to the human race if persons of evil tendencies could be deprived of the privilege of entering into the reproduction of our race, and thereby prevent the transmission of the organic defects that produce their evil phenomena.

Nature's highways and byways are so devious that we fail to discover her

courses in the labyrinth of life, and perchance we follow an *ignis fatuus* that only demonstrates how we may be misled and mistaken in our observations. In the complexity of nature's laws there is a universal equilibrium and after all that is known it is folly in the scientist to attempt to change that which pervades animate and inanimate nature. Life is a subtle thing and in our efforts to sustain and prolong it the nearer we follow the teachings of that which we observe and understand the more satisfactory to ourselves and those that claim our skill and efforts will be our ultimate results. The violation of natural laws as well as perversion of functions is followed by malformations and deformities that afflict the offspring of those that are guilty of such offences. The sins of the fathers are visited upon their children, even unto the third and fourth generations. The crimes committed by the perversion of functions are a sin against nature and a shame to humanity. These offences against nature can only be hinted at in decent society, and the youth of our nation in whom we confide the care and keeping of our social and national life and its preservation should be warned and protected from the dangers that may destroy their physical, moral and social existence.

Were it not for the confidences confided in our profession by which we are bound in sacred honor to withhold the truth we could record the awful results that arise from such transgression of natural laws upon innocent posterity. The phenomena that we observe from such practices as are not to be mentioned are of the most painful and woe-laden character. To the pure, all things are pure, but we who know from our

observations that in the truth of much that can not be recorded there are certain evil influences that certainly prevail to an alarming extent which undermine and destroy many from off the earth whose death records would demonstrate that they had been the victims of their secret sins. The traditional belief that the conduct of every human being is the result of his own free will or lack of education, rather than original physio-psychical constitution, is certainly under the light of scientific investigation being reconsidered. Born to crime is applicable to a class of criminals, and irresponsibility is recognized in criminal sociology as a just mitigation of offences against law and order. That taints of good and evil attend life from the moment it takes its beginning in the elements that enter into its inception is certainly a question of paramount importance in the reproduction of human life and character. The transmissibility of disease conditions is certainly established, especially syphilis in its different stages, it being identical with that which exists in the progenitors at the time of conception. Conformation of the body and similarity of features partake of the characteristics in progenitors and are readily distinguishable in families. It is noticeable that males partake of the characteristics of the mother, and females of the father, although the temperaments of both are readily distinguishable in offspring.

The intimate study of the organic composition of the human brain in its atomic structure and molecular cell-life enables the student to comprehend the phenomena we observe in human thought and action. The molecules have number, kind and shape, and doubtless this establishes their physiological actions. It is in this conception that we arrive at a correct conclusion and understand the nerve centers and their powers, which are coördinated by the cerebellum and spinal cord. Chemical and microscopical examinations differentiate between normal and pathological conditions but do not discover the organic cause of derivations of thought and action. We form our con-

clusions of rational thought and action from that which we observe in lines that are coördinate and normal. The basis of sane and insane thought and action is in the coördination of rational conduct in that which the mind perceives. Perfection or a near approach to it in organic life is attended by phenomena that claim our highest consideration of vital energy. The more perfect the cerebral centers and the material that composes their intimate structures with equilibrate conformation the better will be their manifestations. Conceptions of the human mind are the result of environment, and the conclusions arrived at indicate the power of the brain and its equilibrate action. An index of the phenomena of life is plainly written in the contour of the body and its lineaments which portray human character. The visible traits that we observe in our studies of the human body in physiognomic features are largely correct and it is the handwriting of innate organic perfection or imperfection which is displayed in words and actions.

The philosopher declared that infinite wisdom was not displayed in organic life or human physiognomy, but rather the law of mistakes seemed evident in the larger part of human creation, certainly was not wanting in the power of observation. Perfect types of physical development and mental power are the exception and degeneration painfully evident in studies of humanity. Phenomena are mental and physical manifestations in organic life and not the special idiosyncrasies of individuals. In the science of generation, the *terra incognita* is to the physiologist the subject that the scientist should not too carefully investigate. Knowledge of how we begin life and its conditions is therefore too sacred for man's investigation and yet a large part of the human family stifle, thwart and prevent the functions that enter into normal causation. The evils that follow the prevention of offspring as well as the perversion of the functions that enter into generation are undermining our social life, which is the foundation of our religious and civil

liberty. The crimes of omission and commission that are committed in the physiological and pathological functions of generation are more potent factors in the destruction of life and health than all other causes combined. The evils and ills that afflict and destroy man are the results of perversion and distortion of the sexual function and cannot be fully understood or described. The normal legitimate exercise of the God-given functions of generation are the very essence of life and happiness; on the contrary they may cause more mental and physical suffering as well as degradation of mankind than it is possible to conjecture or comprehend.

We cannot understand the moral and physical results that are dependent upon the illegitimate exercise of the functions of generation. Society is continually disturbed and distracted and individuals are disgraced and debased by the illegitimate and inordinate indulgence of the sexual functions. The diseases that are the result of perversion and inordinate exercise of the functions of generation can not be enumerated, neither can the immediate and remote results be computed in the phenomena that characterize their physical and mental manifestations. Study the laws that govern and produce phenomena and foresee their ultimate results. The crimes of prostitution are the bane of civilization and their demoralizing effects produce a line of evil tendencies that curse and debase mankind. Prostitution is correctly placed in the list of crimes; and laws sufficient for its correction have as yet to be enacted and social and moral efforts are unavailing in its correction. That prostitution is a necessary evil is certainly an evidence of the degeneration existing in the present generation. When we investigate the stigmata of degeneracy we readily arrive at the conclusion that there are modifications occurring during fetal development so that the organs of the body show the effects of the arrest of normal development. It is more especially in the central nervous system in the nervous organization, which impresses heredity. The evolution of mind de-

pends upon the organization of the brain and spinal cord, which influences the coördination of our mental acts and impulses. It is noticeable that congenital defects are transmissible by heredity in generations. The nervous mechanism is responsible for the evolution of deviations from the normal types which produce anatomical, physiological and psychical anomalies which designate phenomena. The influences which affect the nervous mechanism of heredity are drink, craving poisons, inordinate indulgence of the passions and the effects of different forms of neurasthenia.

Congenital organic defects are hereditary to a considerable degree and to the careful observer parental influences present at the time of conception can be traced in the physiological and psychical phenomena of children. The determination of sex in offspring is hereditary and follows lines in progenitors, males partaking of the maternal and females of the paternal influences in family histories. The want of power in male progenitors to impart their characteristics to male offspring teaches the importance of the selection of the female in reproduction. Maternal influences are of vital importance in the possibilities of male progeny. The benefits derived from the correct observance of the laws that prevail in the results of reproduction are inestimable in the moral and social universe. The mistakes that are manifest in the phenomena of generation are the bane of society and the student of sociology perceives that the law of errors prevails. That it would have been better that many had not been born is evident and this question enters into the problems that are of vital interest in our moral, religious and social systems and the civil and economic affairs of our nationalities. The physiologist and pathologist are studiously and laboriously engaged in the solution of the questions that pertain to our continuation in family lines and that many families are becoming extinct is certainly established.

The lives of men set out in tribes determine the continuation of their histories in the primary causes that enter

into their existence and the conditions that surround their development and growth which determines the brevity or longevity of their lives. Morbid irritation of the psychical centers finds relief in evil actions; that is, the organic conformations are such that their tendencies are evil and antagonistic to the welfare of society. The anomalies found in the physical organization of criminals are most interesting and demonstrate that these abnormalities are characteristic and correspond to the classes of crimes committed. The most careful and scientific observers have examined large numbers of criminals and have classified the anomalous conditions found to exist in criminals, and Lombroso has embodied his observations in that most interesting and instructive book "The Female Offender." To those who are interested in the study of the science of generation and its phenomena this work is commended as an invaluable aid in the comprehension of a subject that interests the scientific physician in the prosecution of psychical studies.

Theologians and moralists may proclaim their theories and the causes that aid humanity in absolving itself from degradation and misery, yet our hearts are full of compassion for those that seem so cruelly doomed to fate and our commiserations are made less onerous in the thought that science may yet solve the problem that dooms humanity to conditions in criminal lines. A morbid deviation from an original type which is in its inception transmissible and increases in its power to impress the unfortunate offspring of degenerates may be modified or corrected by a correction in the lines that have produced it. Degeneracy is evident in physical and psychical characteristics, in deformities in stunted growths, in want of symmetry, in abnormal proportions of development, in the abnormalities in coördinate psychical actions in the phenomena of anatomical and mental degeneration. Perfection in physical development based upon the highest and best types in races is the exception so much that we seldom observe it in

anthropological studies. That scientific studies and observations and the conclusions arrived at must direct the minds of thinking men and women to the subject of generation so that conjugal relations conducive to better results shall not only be considered and put into practical use in the continuation of the races, but shall be an imperative duty of every one contemplating the subject of reproduction in generation.

The blots that mar anthropological science in its organic forms and their phenomena darken the pages of history and horrify the student of psychological observation and research. The number of human beings born each day is one hundred and thirty thousand and the degenerate and anomalous conditions transmitted constitute the phenomena of generation. The survival of the fittest is the great social and economic problem of the age. That crimes are on the increase is established and theories as to its causation are discussed, but after all generation and the organic causes found in the brain and spinal cord are the primary and only cause of imperfections of degenerates and the corresponding anomalous characteristics. It is alleged that overwork superinduces neurasthenia and this condition of the nervous system tends to the formation of habits that injure health and morals which is transmissible. Labor is not deleterious to physical development and moral rectitude, but, on the contrary, idleness is the great evil in human society that festers and destroys the physical and moral lives of thousands of the rich and opulent. Labor is honorable in all and conducive to the well-being of the individual in society and State. Idleness is the great scourge of our nation that is destroying our religious, social and economic national systems. The laboring classes are producing the brains and brawn of our generation that is to bear the burden of the perpetuation of our moral, religious, social and civil institutions is as clearly demonstrated as any problem in human progress.

We cannot look to the idle and degenerate of our country for the material

that builds the glory and splendor of our religious, moral, social and civil institutions, but, on the contrary, we elect the industrious, honest, virtuous men and women of our country by birth or adoption, who steadfastly and industriously continue in the way of truth and patriotism in the generation of our people.

Society Reports.

NEW YORK MEDICO-SURGICAL SOCIETY.

MEETING HELD AT THE MADISON AVENUE HOTEL,
NEW YORK CITY, MONDAY, DECEMBER 7, 1896.

THE President, Dr. E. J. Bermingham, in the chair.

Dr. Augustus E. Bieser read a paper entitled WHY IS ANTITOXINE A BONE OF CONTENTION IN THE THERAPEUTICS OF DIPHTHERIA? (See page 293.)

Dr. Joseph E. Winters said that a comparison of the results of a given number of cases of diphtheria treated with and without antitoxine as shown by Dr. Bieser's paper were quite different from what we had been led to expect and from what had been stated by some gentlemen of note.

In diphtheria, as in everything else, it is a question as to the character of the material we are dealing with. This explains why one physician will get a death rate as high as ever reported in cases of laryngeal diphtheria, in spite of the use of antitoxine, while another will get a much lower rate.

Two years ago we were told by gentlemen who were using tubes that the majority of cases of laryngeal diphtheria could be cured by means of calomel fumigation without operation and very flattering reports were received from Brooklyn and other places. Recently we have heard the same thing with regard to antitoxine. Both treatments are used at the Willard Parker Hospital.

Diphtheria varies in its type just as much as does scarlet fever or any other disease. One year the mortality will be very high, while another year the disease will be of a mild type and the mortality low. They say we have a

specific for diphtheria, but what we want is a specific that will save such cases of diphtheria as occurred in the epidemic at the Delaware Water Gap in the autumn of 1894, when it did not cease its hold upon a family until there were none left alive. We want a specific that will reach diphtheria such as they recently had at Bergen Point or Bayonne City, where Dr. Alexander Dallas treated eleven consecutive cases with antitoxine and ten of them died. When we have a remedy which when applied in any part of the world and with any and all practitioners will save seventy-five per cent. of our laryngeal cases, not today or tomorrow but throughout all the years, then we may talk about its having some effect as a specific.

It is a very important question regarding antitoxine whether it is a safe remedy or whether it is injurious.

We have heard a great deal about mixed infection and that our antitoxine does not meet those cases and that we must supplement it by the use of something which will prevent death through the action of the streptococci; that we must inject the antitoxine and then inject antistreptococcus serum. I wish to impress upon the minds of the gentlemen present, that when they are called upon to do these things, they first go and see it used at such places as the Willard Parker Hospital, where it is carried out very thoroughly.

One physician relies on one serum and another on a different preparation and each places his confidence in them until they fail. The fact is, one serum is as good as another;—all equally dangerous.

I question indeed as to whether any one knows anything about the strength of these preparations. The *Lancet* had a commission appointed last spring to investigate this matter and they reported. The *Lancet* was taken to task by the man in charge of one of the laboratories in London, who said they misrepresented that particular serum; that it was of such and such a strength; the *Lancet* replied that the commission was all right and that the strength was just as they had reported.

Dr. Herman M. Biggs made some remarks on ANTITOXINE IN DIPHTHERIA. (See page 295.)

Dr. J. H. Fruitnight said in part: It cannot be denied that the diphtheria antitoxine is efficacious in those cases of diphtheria which are designated by the bacteriologist as true or Klebs-Löffler diphtheria. From a clinical standpoint diphtheria antitoxine is not a cure-all for diphtheria nor is it an agent working unconditionally in every case of diphtheria, for even Baginsky has said that "beneficial effects are not obtained from diphtheria antitoxine in every case, even when used early, being probably due either to a too large amount or excessive virulence of the infection," which may be interpreted to mean a mixed infection.

Dr. George Bieser said that experience had demonstrated to him that in those cases of diphtheria in which antitoxine would be of value the same results could just as readily be obtained by other methods of treatment. In the severer cases he considered it had been an absolute failure. It is not proper or rational to treat but one factor in the disease. While the Klebs-Löffler bacillus is one factor, there are present a number of other bacteria. How are we to know in any particular case that the Klebs-Löffler bacilli are not present with other bacteria and that these other bacteria and not the Klebs-Löffler are the ones which are producing the damage? He said that as a result of his experience he had returned to the supporting, the stimulating and the antiseptic method and thought that today the antiseptic method and not the antitoxine is the true specific for diphtheria, if there is a specific; but it must be employed thoroughly or not at all.

Dr. C. C. Fite said he would like to ask Dr. Winters a question. He spoke of the use of the anti-streptococcic serum. If he understood the position Dr. J. Lewis Smith took in this matter, as mentioned by Dr. Fruitnight, it was that in those cases of mixed infection we use the anti-diphtheritic serum first and then if the case does not improve we use the anti-streptococcic serum. Dr.

Winters said he had studied the matter a good deal lately and was interested in it. He would be very glad if he would let us know what has been done in this city with anti-streptococcic serum.

Dr. Winters replied, in answer to Dr. Fite's question, that in the cases he had seen treated the anti-diphtheritic serum had been applied first and then the anti-streptococcic serum and the two injections made about the same time. The antistreptococcic serum was only used in selected cases, those that had been examined and found free from all complications.

Dr. J. Blake White said that the value of any experience in this line must be measured by the aggregate of individual experience. He himself had not used antitoxine personally, but had seen it used by others and had not observed any better results than from other methods of treatment. He believed in the antiseptic method.

Dr. Biggs said, in reply to several of the remarks in regard to streptococcus serum in use in mixed infection, that it seemed to him if there is one thing definite in medicine it is the specificity of the infectious diseases. It is perfectly certain that diphtheria antitoxine is absolutely valueless so far as streptococcus infection is concerned. It will not neutralize the streptococcus toxine. So far as the use of streptococcus antitoxine in cases of mixed infection is concerned it simply is a question whether the streptococcus antitoxine does neutralize the toxine or not. So far as the use of serum in the Willard Parker Hospital is concerned, it has been in use there less than a week, and he was surprised to hear Dr. Winters' statement as to the kind of cases in which it can be used.

In regard to what kind of cases it can be used in with the greatest benefit, it was decided that it would be better to employ it in those cases which apparently did not have bronchial pneumonias or septicemias, but such cases as the previous history had shown were likely to get it. There is no foundation for the statement, so far as I know the history of streptococci, that it is not to be used in cases which are complicated.

Those are exactly the kind of cases it is to be used in.

In regard to London statistics, in the first place diphtheria antitoxine has not been long employed in London. Englishmen are very conservative and the most extraordinary feature of their whole treatment of the antitoxine question has been the absolute negligence in its preparation. It is only very recently they have had it and they were three months putting up a serum which has no strength in it. It seems as though no one in America would be so foolish as to use it. In the majority of cases it is not more than 60 units and they simply say it is 20 or 30 cubic centimeters, and the investigations of the *Lancet* showed that the serums which were being used in England, aside from the imported serums, are absolutely unreliable. They contain anywhere from one-fourth to one half, or in some cases less than one-fourth of the strength of the serum of a useful standard. He would distinctly contradict the statement that diphtheria antitoxine has been largely employed in London or in Great Britain.

Dr. Augustus E. Bieser said in closing the debate: In reply to the remarks of the previous speakers, while the classification of diphtheria by bacteriological presence is interesting and instructive scientifically, the classification of diphtheria according to its pathological lesions and the clinical history of the case is even more important. A case of false membrane in the pharynx or larynx, either seen by the eye or detected by any other means, with a clinical history of diphtheria, especially irregular temperature, the prostration out of all proportion to the severity of the lesion or its location, would indicate to him that it was a case of clinical diphtheria, whether Klebs-Löffler bacilli are present or not; conversely, a case with white patches in the throat and Klebs-Löffler bacilli present, and the above symptoms of irregular temperature, etc., do not appear, would indicate to his mind that it was not a case of diphtheria from a clinical standpoint. There is great variability as to the presence of the Klebs-

Löffler bacillus in diphtheria and this may be explained by the theory of mutability of germs. Whereas Koch maintains the specificity of germs both as to their form and morphological character. Virchow maintains their mutability in both of these respects. Bucher has been able to convert hay bacilli into anthrax bacilli and anthrax bacilli back into hay bacilli, making the anthrax bacilli lose their virulence in this latter conversion.

Not only is there great variability as to the presence of the Klebs-Löffler bacillus, but in his mind there is great doubt whether it was the sole cause of diphtheria, first, because it has not been disproved that different bacilli can cause the same disease; and second, because it has not been disproved that different bacilli can cause the same toxine. Yeast is not the only germ that can produce the toxine alcohol. Kitasato's germ is a cause of tetanus just as much so as is Tezzoni's, yet the latter is inert raised in bouillon, while the former is virulent. Less than a decade ago it was found by experiments upon animals that a micrococcus was the cause of diphtheria. Now it is the Klebs-Löffler bacillus.

Five years ago the laws taught that the streptococcus was the cause of diphtheria. The truth is both are probably concerned in the causation, making diphtheria a polymicrobic, not monomicrobic, disease. The antitoxine removing merely one element, viz.: the Klebs-Löffler bacillus and its toxine and leaving an equally, if not more, important element (streptococcus) behind can not therefore meet all the requirements of a clinical bedside diphtheria.

The sooner we treat diphtheria in its clinical aspect, with reference to the condition of the patient, especially the state of the vital functions, and make the removal of the cause, as in scarlet fever and pneumonia, of secondary importance, the more recoveries from diphtheria will we record. Tend the emunctories, disregarding the germ altogether (because we do not know it), making its removal of minor importance, and as in pneumonia, keep up the circulation.

MARYLAND
Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

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BALTIMORE, FEBRUARY 6, 1897.

In the *Medical Record* of January 16, Dr. John B. Murphy of Chicago presents an elaborate experimental *The Repair of Arteries and Veins.* resection and suture of injured arteries and veins. He gives the histories of experiments upon dogs, calves and sheep, in which he made incisions into the large arteries and veins, and immediately sutured the wounds with silk, gut or kangaroo tendon. In other experiments he excised considerable portions of the large vessels, and succeeded in effecting an anastomosis between the two ends. In some of the experiments the arteries were united end to end with a continuous suture, in others the end of the proximal portion was invaginated into the distal portion. The arteries experimented on were the carotid, iliac, femoral, abdominal and aorta. The results of the experiments are interesting, and tend to overturn our previous ideas in regard to the restoration of arteries after wounds.

It was formerly thought that an incision

into an artery would not heal, and would almost inevitably be followed by a traumatic aneurism, if the patient did not bleed to death. The experiments of Dr. Murphy prove that a wound in an artery will heal very readily if accurately sutured, and though a sufficient time did not elapse to absolutely prove that aneurism would not follow, yet the presumption is very great that such is the case. Sometimes thrombosis occurred, but in some instances the lumen of the vessel remained quite free. The sutures generally became encapsulated and did not project into the blood current.

Resection of three-fourths of an inch of the larger arteries was done, and the ends reunited without putting any undue tension on the vessels. Some of the arteries were united by a continuous circular suture, others were invaginated. Thromboses frequently, but not invariably, followed. At the point of invagination great thickening and contraction of the arterial walls occurred and usually thrombosis. The experiments upon the aorta were very interesting; this vessel was incised and sutured and sometimes entirely divided and reunited—the animals usually died from hemorrhage, thrombosis or peritonitis. One recovered after transverse incision through all the coats of one-third of the circumference of the abdominal aorta, and immediate continuous suture. It was killed 27 days subsequently, and the vessel was found to be but slightly contracted and not thrombosed.

Suture of wounded veins was attended with more success than were similar procedures on the arteries.

Dr. Murphy tabulates the indications* for operation as follows:

1. Injuries to large vessels in operation.
2. Injuries to large vessels from stab, puncture, bullet or lacerating wound.
3. Traumatic and dissecting aneurisms.
4. Sacculated, fusiform and arterio-venous aneurisms.

He says: "In injuries to large vessels in operation, the injury to an artery, if less than two-thirds of the circumference be involved, should be immediately repaired by suture. If more than two-thirds of the circumference be injured, the division should be made complete and the invagination method used for approximation."

In stab, puncture or lacerated wounds, an

aneurism generally forms, and the sac should be enucleated and the opening into the artery sutured. Acting upon the above principles, Dr. Murphy sutured the femoral vein and artery for a perforation of these vessels from a gunshot wound, in a man. After a very stormy course, it became necessary to reopen the wound, resect a portion of the artery and apply double ligatures to it, and the patient recovered.

In a second case of penetrating wound of the common femoral artery and vein, the perforations were exposed, that into the vein sutured, and the femoral artery resected for a half inch, and the ends invaginated and sutured. The whole procedure required two and a half hours for its accomplishment, and the man recovered.

Whilst the experiments above described and the clinical experience mentioned are interesting, it can hardly be accepted as instituting a principle of practice. The suture of veins seems to be a fairly successful operation, but even this may be followed by thrombosis and embolism, and it would be better, probably, to put a circular ligature on the vessel, if the opening is too large to be closed by a lateral ligature.

In regard to the suture of arteries, there can be no particular objection to the procedure in the vessels of the extremities; thrombosis will probably occur, but that would be no more dangerous than a ligature, as both would equally arrest the circulation. On account of the danger of cerebral embolism it would seem to be unsafe to suture the common or internal carotid arteries.

A GOOD physician is very often a poor citizen. The opinion has too often been expressed that physicians *Physicians as Citizens.* should show no interest in the federal, State and municipal government and exhibit an ignorance in matters political. At the recent celebration at the fiftieth anniversary of the New York Academy of Medicine, Mr. Cleveland, the President of the United States, delivered an address which contained not only humor, but good, hard sense and was expressed in a terse and clear manner. He paid a just tribute to the physician and compared the medical man of the present day with the old family practitioner and country doctor.

In conclusion he pointed out very clearly that the physician, as well as any other citizen, had civic obligations and responsibilities and he ended his remarks with the following well chosen words:

"We cannot but think that the discoveries and improvements in medical practice which we now enjoy are dearly bought if the members of the profession in their onward march have left behind them their sense of civic obligation and their interest in the general public welfare. We cannot accuse you of utter neglect of your duty to the country and yet we cannot keep out of mind the suspicion that if your professional work in exposing evils were more thoroughly supplemented by labor in the field of citizenship, these evils would be more speedily corrected.

"If laws are needed to abolish abuses which your professional investigations have unearthed, your fraternity should not be strangers to the agencies which make the laws. If members of your profession were oftener found in our national and State legislative assemblies, ready to advocate the reformatory measures you have demonstrated to be necessary and to defend your brotherhood against flippant and sneering charges of impracticability, the prospect of your bestowal upon your fellow-man of the ripened results of your professional labor would be brighter and nearer.

"Our government was founded in the faith and anticipation that those who loved it most and were best able to hold it steady would be at its helm. Without this it will surely go astray. Never did patient need your medical treatment more than the body politic now needs the watchful care of your patriotic and disinterested citizenship."

Words uttered with such force, before such an assemblage and on such an occasion by a man occupying the highest position which this country can give him, should be heard with respect by the medical profession. Physicians pay taxes, many prosperous physicians invest money and take an interest in government; why should they not then take an active part in sailing the ship of State and be ready to advise in all matters relating to their profession as well as on other matters requiring thought and consideration? Mr. Cleveland had done well in urging this on the physicians and his advice should be respected.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending January 30, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		22
Phthisis Pulmonalis.....		20
Measles.....		
Whooping Cough.....	4	3
Pseudo-membranous Croup and Diphtheria. }	35	19
Mumps.....	6	
Scarlet fever.....	16	1
Varioloid.....		
Varicella.....	4	
Typhoid fever.....	4	

Incoming mail from India is fumigated before distribution.

Dr. Zdekauer, the private physician of the Czar of Russia, is dead.

Typhoid fever causes the death of 48,000 people in the United States annually.

There have been 4396 cases of the plague at Bombay, with 3275 deaths.

The Medical and Surgical Society held its ninety-sixth annual meeting and banquet last week.

Dr. J. Tyler Smith has succeeded Dr. Hiram L. Spicer as Assistant Health Commissioner of Baltimore.

Dr. William H. Burt, one of the most prominent homeopathic physicians of this country, died at his home in Chicago, last week.

Dr. John W. Hilleary, a well-known physician of Petersville, West Virginia, for the past forty years, died last week, aged sixty-six years.

Dr. Thomas A. McParlin, a retired surgeon in the United States Army, died at Annapolis, his native city, last week, aged seventy years. Dr. McParlin was graduated from the University of Maryland in 1847.

At the Health Conference to be held Wednesday and Thursday, February 17 and 18, Dr. William Osler will deliver the address to the delegates, to which Dr. S. C. DeKrafft of Cambridge, President of the State Board of Health, will respond.

The City Councils of Philadelphia have passed a loan bill for \$3,000,000 for the construction of a filtration plant in connection with the several pumping stations embraced in the water supply of the city.

Dr. Jacob A. Stayman, who ceased to practice medicine almost thirty years ago, died last week in Baltimore. Dr. Stayman was seventy-one years old and a graduate of the University of Pennsylvania.

Dr. Charles Wardell Stiles of the Bureau of Animal Industry, Washington, D. C., will begin a course of lectures at the Johns Hopkins Hospital on "Animal Parasites," February 4, at 4.30 P. M., in the university amphitheater.

Dr. Charles M. Franklin of Lancaster, Pa., was elected first assistant physician at the Sheppard Asylum to succeed Dr. Edwin R. Bishop. Dr. Franklin is a graduate of the University of Pennsylvania and has had experience in mental diseases.

Dr. John S. Fulton has only been fairly successful in collecting State health statistics. Of 738 physicians outside of Baltimore repeatedly written to but 238 replied. There were thus reported 1131 cases of typhoid fever with 205 deaths; 349 cases of diphtheria and 398 of scarlet fever. No births were reported.

The first annual banquet of the Washington branch of the University of Maryland Alumni Association was held last week at Washington, D. C. Dr. J. H. Mundell was elected President; Drs. J. W. Bayne and T. Morris Murray, Vice-Presidents; and Dr. I. S. Stone, Secretary and Treasurer. Drs. L. McLane Tiffany and R. Dorsey Coale of Baltimore were the guests of the association.

Dr. Perry Millard of St. Paul, Minnesota, died on February 1, in the private ward of the Johns Hopkins Hospital, of pernicious anemia. He had been there for nearly two months and though at first hopes were entertained of his recovery, he has lately been failing rapidly. Dr. Millard was one of the most prominent members of the profession in the northwest. He was one of the first promoters of the Association of American Colleges and he had been for many years Dean and Professor of Surgery in the University of Minnesota. His labors as an educator helped greatly to advance the curriculum of studies in the medical schools of the west.

Book Reviews.

1. TWO CASES of Protozoan (Coccidioidal) Infection of the Skin and Other Organs. By Emmet Rixford, M. D., and T. C. Gilchrist, M. R. C. S. (Eng.), L. S. A. (Lond.).

2. A Case of Blastomycetic Dermatitis in Man. By T. C. Gilchrist.

3. Comparisons of the Two Varieties of Protozoa and the Blastomyces found in the Preceding Cases, with the so-called Parasites found in various Lesions of the Skin, viz., Psorospermiosis, Follicularis Vegetans (Darrier), Carcinoma, Herpes Zoster, Molluscum Contagiosum, Varicella. By T. C. Gilchrist.

4. Two Cases (Including one in the Negro) of Molluscum Fibrosum, with the Pathology. By T. C. Gilchrist.

5. The Pathology of a Case of Dermatitis Herpetiformis (Duhring). By T. C. Gilchrist.

Reprint from the *Johns Hopkins Hospital Reports*, Volume I.

This monograph shows evidence of the extended work which the author has done in diseases of the skin. The pathology of the cases is thoroughly given and the plates are reproduced with faithful accuracy. While it would be impossible to give this excellent work a thorough review here, it is sufficient to say that the papers are all characteristic of the care and thoroughness of all the work of this author.

The Johns Hopkins Hospital Reports. Volume VI, No. 1. Report in Neurology. III. By Henry J. Berkley, M. D.

Dr. Berkley's fasciculus of the Reports contains principally the result of work showing the effect of certain poisons and toxins on the nerves and a series of studies on the lesions produced by the action of certain poisons on the cortical nerve cell. A small part of the monograph is devoted to the discussion of the intra-cerebral nerve fiber terminal-apparatus and mode of transmission of nervous impulses; also an article on asthenic bulbar paralysis. Dr. Berkley has been a voluminous contributor to the histology and pathology of the normal and abnormal nervous system and this monograph is the outcome of a large amount of work which he has done carefully and thoroughly.

Current Editorial Comment.

THE LAYMAN AND MEDICINE.

Physician and Surgeon.

THE layman's knowledge of medicine or surgery, except in exceptional cases, is usually so erroneous that it is usually felt to be worse than none at all, as a help to a rational understanding of the conditions of disease. A knowledge of medicine by the laity is always to be encouraged. That a little knowledge is a dangerous thing is the most fallacious of aphorisms. A man with no knowledge is much more likely to make his want of knowledge do the work of some, than is a man to make his little knowledge do the work of more.

CONSUMPTION.

Canadian Journal of Medicine and Surgery.

THAT consumption is a communicable disease is well nigh universally admitted by medical men, and should be generally understood by the public, but with this knowledge should go the further understanding that the danger of contagion is but slight, and may be absolutely controlled with ease, that is, by caring for the sputum in pulmonary cases and for the alvine discharges in the intestinal form of the disease. But experience proves that it is much easier to arouse public apprehension of danger than it is to control it when once aroused.

COVERT ADVERTISING.

Medical Record.

ADVERTISING pages are as much an essential part of a journal in respect to a doctor's needs as the reading-matter; they both go to him at the same time, both appeal to him legitimately along different lines. The different departments have their function and place, and the integrity and worth of each are only properly maintained by keeping one absolutely separated from the other. Subscribers never complain of this, and are always generous with fair-minded advertisers accordingly; but they nevertheless hate to be fooled, and rightly resent the covert persuasions of the real fool at the other end, by refusing to read what he has written or to believe what he has said. Furthermore, and this is where some editors are shortsighted, the readers come to look upon every article published in journals which commit such blunder with a degree of suspicion which ultimately becomes intolerable.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. RUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. Mrs. M. H. ANDERSON, 1st Vice-President. Mrs. MARY F. CASE, Secretary.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY. Meets 1st Monday in each month. N. P. BARNES, M. D., President. W. F. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

I HAVE tried Cactina Pillets and find them excellent, especially in palpitation of the heart.—A. A. ANDREWS, M. D., Sedan, Kas.

ANTITOXIN has been before the profession for a year and a half, and today it is ranked as one of the greatest discoveries in modern therapy. Mulford's Concentrated (Extra Potent) Antitoxic Serum has received the unqualified endorsement of all authorities, for concentration, uniform strength and reliability. Most recent brochure on diphtheria treatment free.—H. K. MULFORD CO., Philadelphia, Chicago.

WAR DEPARTMENT, SURGEON GENERAL'S OFFICE, Washington, D. C., January 3, 1890:—This is to certify that the exact antiseptic strength of "Tyree's Pulv. Antiseptic Comp." is one part of the powder to fifty of water (1.50). A heaping teaspoonful (90 grs.) to one pint of water (16 oz.). In determining the antiseptic qualities of this compound, the following method was employed: Test tubes containing peptonized beef broth were charged with the powder, so as to make different strength solutions, varying from one part in ten to one part in two hundred. The solutions were then inoculated with the anthrax bacillus, and with the staphylococci of pus, and the tubes placed in the incubator for 48 hours at a temperature of 39° C. On removing the tubes from the incubator, it was found that the solutions of one in ten, to one in fifty, there was no development of bacteria, while in all the tubes above, one in fifty, the bacteria had developed.—W. M. GRAY, M. D., Microscopist to Army Medical Museum.

The above analysis is an unquestionable proof that this powder is a distinct specific for that difficult form of bacteria which produces so many vaginal complications. It was originated for that purpose, and is the most important preparation ever offered to the medical profession for the treatment of leucorrhea, gonorrhea and kindred diseases. The usual treatment in these cases seems to afford relief only; while this powder through its specific *alkaline* properties entirely destroys this form of bacteria without the slightest corrosive effect and being entirely soluble in water and very inexpensive, its range of usefulness is indeed great.

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Original Articles.

THE TREATMENT OF SYPHILIS.

By Henry Alfred Robbins, M. D.,

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 7, 1896.

SECOND PAPER.

It seems as if material comes to us just when we want it. We were anxious to show you a case of maculo-papular syphiloderm and here you see it all over this quadroon girl, who is pretty and nineteen years old. There is a history of a sore on the genitals, which the girl says she noticed two months ago. Dr. Armine has called our attention to an indurated spot, located on the left labium externum. You feel also slight enlargement and hardness of the inguinal glands, just above Poupart's ligament. Feel above each elbow and you will find something that will roll under your fingers like little marbles. They are the epitrochlear glands. Her face alone seems not to blush with the eruption.

This patient reminds me very much of one that a brother practitioner sent me to see some years ago. He told me that he did not know what it was, unless it was a case of "erythema universale." It did itch, however, and very badly, too. That is not the case with a syphiloderm. There were no catarrhal symptoms and no typical tongue of scarlatina. I glanced around the room and saw on the washstand a black, shiny-looking thing, which had a very blunt-looking nozzle. Such an instrument is sometimes used for washing out ears. In close proximity there

was a six-ounce bottle. It occurred to me that it might contain that good, old-fashioned mixture named after Washington's most intimate friend, the Marquis de la Fayette. I suggested that the patient had an attack of gonorrhea and that the eruption was a medicinal one, caused by the copaiba in the mixture. It turned out to be the case, and stopping the administration of the *Mistura la Fayette*, the patient made a rapid recovery, as far as the skin trouble was concerned.

The Marquis, however, is not responsible for the girl's eruption. Under specific treatment it will rapidly disappear. It is one of the most benign of the manifestations of syphilis.

We formally present to you for examination another girl, aged twenty years, whose skin is not so lily white. No white man's blood courses through her veins. In Vienna there is no mock modesty. It makes no difference as to the sex or age of the patient. When one appears a transformation act takes place and you behold a being as bereft of wearing apparel as Venus was, as she is represented on the big sea-shell, with nothing to cover her but her hair.

When I was in Paris I never missed going to the studio of an artist friend, which exactly resembled that of the studio of Du Maurier's friends "Taffy,

the Laird, and little Billee," when he was painting from "the altogether."

Now imagine that the girl is a black "Trilby." Do not look at her feet, because if you do the illusion is gone. Keep your eyes fastened on her arms and legs. You notice that there is a large collection of epidermic scales. They are dry and thick and of a dirty, grayish color. It is the papulo-squamous syphilide. There is only one skin eruption that you could possibly mistake it for and that is psoriasis. Some writers call it psoriasis syphilitica, but there is no such thing. Arsenic, in its effects, is magical in psoriasis. In this case you might give it in all its forms, but it would have no effect on this syphilderma. Under specific treatment you will notice marked amelioration in a very short space of time. It belongs to the late secondary stage. You find a syphilitic history in this case, as far as enlarged glands are concerned, especially of the epitrochlear. The history of an initial lesion is sometimes very difficult or impossible to obtain, as you find in this case.

If hereafter you see much of this disease you will lose confidence in mankind.

We are not influenced by any false statements of any patient. Fortunately the disease is not in the air, as some would have you believe.

Then it makes no difference to us how any person was contaminated. We are here to recognize and treat diseases of the skin and to the best of our ability impart our knowledge to you.

How shall we begin treatment? That depends entirely upon the stage of the disease and the idiosyncrasies of the patient.

Let us give reasons for what we do and not go to work in a blindfolded, hap-hazard sort of way.

The two medicines that you have seen us prescribe so often are mercury and iodide of potassium.

The micro-organism of syphilis has not yet been discovered, but we know that the lymphatics have absorbed something, which, if left alone, goes on to multiply indefinitely, causing cell

accumulations and connective tissue deposits. The various syphiloderms are manifestations. If the disease is not arrested in the secondary-stage this process goes on, resulting in changes of the arteries and formation of gummata, not only externally, but in the vital organs. Later on I will report examples, as I have taken the trouble to study the subject and some of my writings have found their way into print.

The diagnosis of visceral syphilis is made, not from any particular symptoms, but a combination of many, going back, if possible, to a history of a chancre, occurring years before.

The object of treatment is to give something that will hasten the destruction and elimination of the poison and its products and that corresponds to the properties ascribed to only one drug and that is named after one of the mythological gods—Mercury.

This reminds me that years ago when the old-fashioned stages used to run up and down Broadway, New York City, a well-known physician crawled into the rear end of one and found seated there "a maiden fair but frail." He was invited to spend half an hour with Venus. The physician sighed at the moral depravity of the invitation and replied that half an hour passed with Venus means many months passed with Mercury.

The answer contained "more truth than poetry." You find a good many here passing their time with Mercury, but as yet we have not had any "*Nymphs de Pave*." The name venereal comes from Venus, "the goddess of love or pleasure." The sooner she is dethroned the better it will be for the world.

We do not propose, however, to take up the "social evil" question, only so far as to inform the public as to the danger of acquiring syphilis in an unmerited way.

Having decided to begin treatment with mercury, we at first think of the most convenient and acceptable way to give it to the patient and that is by the mouth. Before doing so we should make a careful examination of the buccal cavity and see if the teeth are in a

good condition. If not, send your patient to a dentist. Prescribe a tooth wash containing the tincture of myrrh. Forbid the chewing of tobacco. Remember that the favorite seat of mucous patches is in the mouth. Jullien says the history of an average case of syphilis may be summarized as follows: "A chancre, a transitory erythematous rash, and following this, mucous patches, relapses of mucous patches, more mucous patches." You know that the secretion of a mucous patch is in a high degree contagious. Next to the chancre it is the commonest source of infection.

I might as well state here, that nothing is equal to black wash (*lotio hydrargyri nigra*) either in full strength, or diluted with water, for the cure of mucous patches of the mouth, used as a gargle several times a day.

After attending to the cleanliness of the mouth, we give some form of mercurial pill. I am not going to burden your minds with a lot of formulae. Nearly every patient that you will have in private practice will show you several, which a physician or friend has given him I have had them presented to me for examination by former patients of physicians from Portland, Maine, to New Orleans, and across the continent to the Hot Springs of Arkansas, and San Diego, California.

Remember that in giving mercury it is your object to give the patient as much as can be absorbed, or as much as he can take, without injuring his general health. Look out for the symptoms of salivation, such as increased and thickened mucous saliva, pain felt on snapping the teeth together, a feeling as if the teeth were elongated, etc. Stop when the gums are slightly touched. If ptyalism does occur, give the saturated solution of the chlorate of potassium, every hour or two as a gargle, and a little to be swallowed.

You notice that we generally prescribe during the first year of syphilis the proto-iodide of mercury or the hydrargyrum cum creta; the latter is the form of mercury that is preferred by Jonathan Hutchinson.

We begin with one-fourth of a grain

of the proto-iodide three times a day; if we do not see almost immediate good results, we give four, then two in the morning, one at noon, then two at night, then six a day, and so on until we have slightly touched the gums. Sometimes you will find that the patient will not get along well, until you add iron to the prescription. Such a one is recommended by Dr. F. R. Sturgis of New York, which contains two grains of blue mass to one of iron. It has an excellent tonic effect.

Some people can not take the proto-iodide of mercury without its producing colicky pains and diarrhea. I had such a case, a short time ago. When I discontinued it, and gave in place of it the tannate of mercury in one grain doses three times a day, it agreed perfectly with the patient. Since then I have prescribed it for several and with satisfactory results. The dose is from one to five grains.

How long shall we keep up treatment by this method? Formerly I kept the patient on a mercurial pill for one year or eighteen months. Now acting on the published recommendation of Dr. R. W. Taylor, at the end of six months, I give the patient a period of rest. That is, I give the pills in as large doses as he can absorb for twenty days and stop ten. If all goes on well, then at the end of a year, and during six months, I give the drug for fifteen days, and stop fifteen. During the intervals I give freely of tonics. Lately I have alternated this treatment with the inunction method, which I will explain to you on another day.

At the end of a year and a half, I give what is called the "mixed treatment." That is a combination of mercury and iodide of potassium. There is a great difference of opinion in relation to the action of this combination. The object of treatment is to destroy and eliminate from the system the products of the syphilitic virus. Perhaps mercury is the destroyer, and the iodide of potassium removes the debris.

As good a prescription for the mixed treatment as you can find is the renowned "Sirop Gibert." Its value has

added to the reputation of a famous syphilographer, and it is still often prescribed at home and abroad.

R.—Hydg. biniodid. . . gr. j
Potass. iodid. . . ʒ j
Aquae . . . f ʒ j

Filter through paper and add
Syrupi Simplicis. . . f ʒ v

M. Sig. A tablespoonful three times a day.

The mixed treatment is also given in tablet triturate form. This treatment we continue for twenty days, and then give ten days' rest. During the third and fourth years of the disease we give the patient a rest from treatment of one, and sometimes two, months if there is no symptom of the disease present. Really, at this age of syphilis, you have to deal with the sequelae of the primary and secondary stages, and now it is the time when the iodide of potassium is your sheet anchor.

If syphilis had not been properly treated, there comes a day of reckoning, and the victims of the disease (and ignorance somewhere) are attacked with apoplexy, albuminuria, heart disease, etc., when in reality they are dying from the structural changes of syphilis, which proper treatment would have eliminated.

THE CAUSES OF APPENDICITIS.

SOME points of interest as recorded in the *Lancet* in connection with the pathogeny of appendicitis were discussed at a recent meeting of the French Société de Chirurgie. The view of M. Dieulafoy, that the disease is a consequence of constriction with closure of the appendix and the consequent retention of morbid material within it, did not find much favor.

On the contrary, several speakers referred to the frequent existence of this condition without appendicitis, and at the same time mentioned cases in which they had found a perfectly permeable appendix to be the seat of inflammation.

The general opinion of those who took part in the discussion was that appendicitis is usually only the local expression of a more or less general entero-

Many years ago I had the honor of walking the wards of Guy's Hospital, under the tutelage of that great physician Dr. Samuel Wilks, who still lives enjoying the honors of a long and distinguished career. In 1886, Dr. Wilks, in a lecture on "Medical Treatment," said: "I think I can show how an improved treatment has come about, not by the discovery of new drugs, but by a better knowledge of the nature of disease, and by clinical observation. Thousands of persons are now cured of epilepsy, paralysis and various other nerve disorders by means of iodide of potassium, and why? Because syphilis was found to attack the brain and internal organs, when a more extended and closer observation of morbid structures was begun to be made in the post-mortem room. Let me most emphatically dwell upon this point, that an improved treatment saving thousands of lives annually arose, not from the discovery of a new drug, but from work in the dead-house."

At the conclusion of our next service, I will continue the subject of iodide of potassium. How it should be prescribed with care. Its dangers as well as virtues. Then we will go on to other methods of treating syphilis.

colitis. The theory of M. Reclus is worth quoting as a more detailed statement of these opinions. According to him the problem of causation is capable of a double solution—(1) as being related to the presence of an actual foreign body in the appendix, a condition of course hostile to spontaneous recovery, and (2), as explained by a "theory of stagnation." This view regards the appendix and in a less degree the cecum as diverticula which readily allow the accumulation within them of organic fluids, these in turn becoming the seat of fermentative changes. Inflammation follows as a natural consequence. In this comprehensive and moderate statement we shall probably find the nearest approach to explanation of a malady the clinical aspect of which is, as a rule, sufficiently obscure.

THE ABUSE OF SURGERY.

PARIS DOCTORS UNDER ARREST ; INTERPOSITION OF AN ENGLISH JURY IN A CASE OF OVARIOTOMY.

By C. W. Chancellor, M. D.,

United States Consul at Havre, France.

IN an article published in the JOURNAL of the 3rd of October, 1896, on "The Abuse of Surgery," it was shown that recent exposures of Parisian ovariologists were only too well founded, and that filthy lucre proved the bane of not a few weak members of an honorable and honored profession ; but sufficient for the day are the sensations thereof.

Two well-known Paris physicians have just been charged with a crime of the most startling character. Dr. Boisleux and Dr. de la Larrige are the two physicians. The former, a specialist in gynecology, performed and the latter assisted at an operation on Miss Thomson, a young unmarried English woman, who had been betrayed by a married man, Monsieur Mausey, president of "The Artistic and Literary Society of Paris," who has since committed suicide.

Dr. de la Larrige, whose brother is an officer of high rank in the French army, has made the following statement: "M. Mausey, whom I had known for some time past, came to me about five weeks ago, accompanied by Miss Thomson, whom he introduced as a person in whom he took great interest. He was, he told me, bringing a friend to a friend for advice. Miss Thomson complained of pains in the stomach. I examined her and judged that she was suffering from an endometritis which a very simple operation would suffice to cure.

"As I devote myself chiefly to diseases of the respiratory organs, I advised M. Mausey to take Miss Thomson to a specialist on gynecology, and gave him the address of Dr. Boisleux, 58 rue de l'Arcade. M. Mausey and Miss Thomson came again to see me on Sunday, November 21. They had been to see Dr. Boisleux, and now came to ask me

to obtain a special fee in their favor. I saw Dr. Boisleux, who agreed to perform the curetting operation required for five hundred francs. The next Monday Miss Thomson went to Dr. Boisleux's maternité, and at nine o'clock the same morning, the latter began the operation. Another doctor, an American, whose name I do not remember, and myself assisted him.

"In the course of the operation Dr. Boisleux discovered, with terror, that Miss Thomson was two months *enceinte*. Very naturally this aggravated the condition of the patient, and the ensuing Wednesday Dr. Boisleux performed laparotomy in the presence of his two colleagues. This difficult operation apparently succeeded, but on the following Friday, Miss Thomson succumbed to an inflammation which ensued."

It is worthy of note, especially in view of the foregoing declarations, which reduce the part played by Dr. de la Larrige in this sorry drama to slight importance, no warrant for his arrest has been issued, but he is simply "detained" *maintenu à la disposition du parquet*, to quote the French phrase. Dr. Boisleux was immediately placed under arrest but the American physician, spoken of by Dr. de la Larrige as being present, is unknown to the authorities or, at least, *non est inventus*. He was no doubt only "a looker-on in Vienna ;" but if it is all a mistake, and justice should have taken a wrong track, why does he not come forward and speak for the honor of his colleagues and profession ?

That "doctors differ" is an aphorism, but the extent to which they do so, apart altogether from diagnosis and prescriptions, is shown in a side-issue of this case, which has been so prolific in

developments. Dr. Boisleux belongs to the "Syndicat Général des Médecins de Paris et du Département de la Seine." This body met on Saturday last, December 6, and voted an order of the day defending, on scientific grounds, the imprisoned physician, expressing a high opinion of his disinterestedness and science, and refusing to believe in the possibility of his being guilty of the charge brought against him.

Thereupon another medical association, the "Syndicat des Médecins de la Seine," issued a note to the effect that it had no connection with the first mentioned organization, and that it had not discussed the case of Dr. Boisleux. To add to the embroglio, Dr. Cornet, president of the first named association, accuses the Paris faculty of being hostile to private clinics like that of Dr. Boisleux's, while Professor Brouardel, president of the other association who made the post-mortem in the case of Miss Thomson, denies emphatically that any such hostility exists.

THE ENGLISH CASE.

The verdict of a jury in a medical case which has just been decided in the Queen's Bench Division of the London courts, before Mr. Justice Hawkins and a special jury, seems to make very nearly absolute the discretion of doctors in the matter of ovariectomy. There was indeed some conflict of evidence in the case. The plaintiff alleged that she expressly objected to the more serious operation; the defendant that, tacitly by her own conduct and indirectly through another doctor, she consented to it. This much, however, seems to have been common ground—namely, that she did not desire, and did not expressly consent to, the operation which, in fact, was performed. She consented, it appears, to the milder operation; but did not wish the severer to be carried out.

The surgeon himself, in his own evidence, showed that he was well aware of this, for when in the course of the operation he found that the severer one would in his judgment be desirable, he stopped to consider, and after consideration decided on over-riding the patient's

wish in the interest of her health. The judge and jury felt no difficulty in deciding that he was right; from which decision it seems to follow that those who submit to the surgeon's knife must trust him all in all or not at all.

The case was an action in which the plaintiff, a professional nurse, claimed damages from the senior obstetric physician of St. Thomas Hospital, London, because, she alleged, he had performed a series of operations upon her contrary to her express direction. On the other hand, it was said that the operation was a necessary one, and that the patient placed herself entirely in the hands of the surgeon, and had, to an under officer of the hospital, consented to the operation being performed.

The plaintiff stated that she had only consented to the single operation (the removal of one ovary) being performed on condition that there should be no double operation, and that the surgeon consented to that. To this he replied: "I know your wish. You may be sure that I shall not remove anything that I can save." With this understanding she got on the operating table, lay down and took the anesthetic.

In reply to this the surgeon testified that the operation as performed was absolutely necessary in the interest of the plaintiff and for the preservation of her life. Continuing, he said: "When the operation had been partly performed he saw further the condition of the patient and said, 'Considering the patient's wish, this case involves serious complications and I shall have to consider a bit.'"
One of the persons who were in the room suggested that as the plaintiff's sister was outside the room it might be a way out of the difficulty to speak to her, to which the surgeon replied: "No; I have taken the responsibility of this operation, and I must accept it wholly. I do not think it would be fair to put any part of it upon the patient's sister. I have been performing operations for twenty-five years, have performed some six hundred operations and two hundred and fifty of them were operations of this nature."

The surgeon further testified that he

attended the plaintiff for a week after the operation. She asked him what operation had been performed, and when he told her she became excited, lost control of herself, screamed and applied opprobrious names to him. She had to be removed into a ward where she would be by herself. This, he said, was for the sake of the other patients. He denied that he was, as alleged by the plaintiff, unkind to her during the week he attended upon her, and that he threatened to put her into a lunatic asylum.

Several physicians testified that from what they had heard of the case the operation was necessary for the good health of the patient, after which the jury interposed, saying they were agreed upon a verdict adverse to the plaintiff. Counsel for the plaintiff said: "All that I can say is that my client is very anxious that the case should continue until it shall come to its natural termination," to which the justice replied, "If the jury say that they have made up their minds, with all the experience I have had, I do not think it is likely you can change that. The cost of another day's trial is a very serious matter to the defendant; to the plaintiff it does not matter, for other people are paying her expenses." A verdict was thus given for the defendant.

As to the soundness of the verdict, it is quite in keeping with that rendered against the unfortunate Mrs. Castle by an English court a few weeks ago. Of course, there may have been exceptional circumstances in this particular case which inclined the jury to take the view they did. But looking at the general issue involved we do not find the question very simple. We can appreciate the surgeon's position.

His reputation may be at stake in such cases; and if he does not do what he believes necessary to the patient's health or life, then, and in the event of any untoward issue, he would feel himself to blame.

But, on the other hand, ought not a patient to have the right of deciding for himself or herself, "thus far and no farther?" After all, this patient's life

was her own affair and there is apparently no reason why she should be compelled by the surgeon's decree, "for the sake of life to lose what makes life worth living."

Perhaps, however, the case decided by Mr. Justice Hawkins and the English jury does not go quite so far as maintaining this proposition. But what seems clear is that any patient in similar circumstances will do well in future to set out precisely beforehand, in black and white, the conditions and limits of the operation to be performed. The uncertainty which admittedly enveloped the case in question is unfair to both patient and doctor.

PLAGUE IN BOMBAY. CHOLERA IN SINGAPORE.

European papers recently published important dispatches from Bombay and Singapore regarding the plague and cholera. At Singapore the plague has not yet made its appearance, but the cholera has broken out with considerable violence. At Bombay the plague has already killed eight hundred people and the situation is very alarming.

The outbreak of these two dreaded diseases in the east at this season and the almost certainty of their reaching Europe early in the spring has come with all the shock of surprise and naturally imposes heavy responsibilities upon the public authorities, both here and in our own country. The records of accurate and intelligent observations carried on in reference to the outbreaks and progress of cholera during the last few years offer invaluable data to the students of epidemics.

They do not, it is true, teach us anything which we did not know before, and that is, perhaps, not the least satisfactory feature about them. They simply confirm with a terrible impressiveness conclusions to which science had already come. They warn us that the neglect of certain rudimentary laws of sanitation may suddenly work wholesale destruction under unfavorable conditions and they show that it is still possible for the member of a community to persevere in such neglect until the time

for prevention has gone by and the enemy is already raging and doing harm in their midst.

But what is the use of interminable, wire-drawn disquisitions on this or that heroic operation, this or that bacillus, when communities fly persistently in the face of those all-important laws, the discovery of which constitutes the real advance in medicine made by our age.

Municipal authorities never do move in these matters until they are compelled, and to a certain extent they are right, for public money is involved and that should not be spent without a clear case. It must, therefore, be left to the press to supply the necessary compulsion in the public interest and in matters of sanitation that duty falls especially on the medical press.

AN INTERESTING CASE OF NERVOUS ANACIDITY.

By Moses Savage, M. D.,

Attending Physician to the Department of Practice of Medicine, City Hospital Dispensary, Baltimore.

CASES of nervous anacidity are not unusual, but the occurrence in a lad of sixteen years is rather a curiosity. I therefore report this case as being of considerable interest.

H. E., aged sixteen years, whose mother and sister are very neurotic, had been complaining for three years with a train of nervous and dyspeptic symptoms, indefinite pains of a neuralgic character and general depression. Often he suffered from colicky pains in the hypogastrium, lasting about an hour and usually relieved by relaxing the abdominal muscles. He had a distaste for meat.

Two weeks before I first saw him he had been troubled with colicky pains, soreness in chest, bad taste in mouth, hawking and spitting in the morning, headaches and nervousness.

He had a chronic naso-pharyngitis; heart and lungs normal. He exhibited an extreme neurotic disposition and exaggerated his troubles. I put him under various stomachic tonics, changing from one to another, and have almost exhausted my knowledge of the *materia medica* for such cases, with the result of either partial, temporary relief or complete failure.

On the 5th of December there was practically no improvement. He complained of thoracic oppression, soreness in the chest (probably intercostal neuralgia), chilliness, flushes of heat and general depression. Whilst he told me that his appetite was poor, his parents

maintain that it was rather excessive and that he worries them considerably by claiming that he was seriously ill.

December 22. Patient claims that he does not feel any better, is troubled with oppression, cannot take a full breath and is low-spirited. Examination of his gastric contents showed entire absence of free hydrochloric acid; total acidity 2.0; contents badly digested and no mucus. He was given diluted hydrochloric acid, five drops, three times a day. For a whole week after he had profuse night sweats.

January 5. No improvement. Examination of the gastric contents again demonstrated the absence of free hydrochloric acid; total acidity only 1.5; no mucus.

January 24. Third examination: No free hydrochloric acid; total acidity 2.0; no lactic acid; pepsin ferment normal; rennet zymogen $\frac{1}{100}$; no mucus.

The absence of mucus in the gastric contents and the manifold nervous symptoms leave no doubt but that this is a case of pure neurosis, gastric catarrh being entirely excluded. This case is of interest in showing how a nervous condition may entirely abolish the secretion of the hydrochloric acid of the gastric juice. In this condition, as has been shown by Boas and Julius Friedenwald, the rennet ferment and its zymogen are present in normal proportions.

It is also interesting from the fact, as has already been stated, that the condi-

tion was present in a lad of but sixteen years.

I am indebted to Dr. J. Friedenwald for his aid in the publication of this communication.

(Boas: "Allgemeine Diagnostik und Therapie." 3. Auflage. S. 190. Julius Friedenwald: "The Quantitative Estimation of the Rennet-Zymogen." *Medical News*, June 22, 1895.)

Medical Progress.

REPORT OF PROGRESS IN DISEASES OF THE EYE AND EAR.

By Hiram Woods, Jr., M. D.,

Clinical Professor of Eye and Ear Diseases, University of Maryland; Surgeon at the Presbyterian Eye, Ear and Throat Charity Hospital, Baltimore.

AND

E. E. Gibbons, M. D.,

Assistant Presbyterian Eye and Ear Hospital.

GLAUCOMA IN RELATION TO GENERAL PRACTICE.

THIS is the subject of a paper in the *Southern Medical Record* by Alexander W. Stirling of Atlanta, Ga. Glaucoma is to the ophthalmic specialist a most interesting disease. It is interesting to him because, from the remotest times into which the history of medicine can carry us, down to the present day, it has been a subject of difficulty and discussion; because there is probably no other ocular disease, a proper understanding of which has been so dependent upon a clear grasp of true physiological process within the eye, and whose development has followed so closely upon these; because it is a morbid process of such relentless nature that, once established, if uncombated, it seldom or never relinquishes its deadly progress until the eye and in the majority of cases, both eyes, are quite disorganized, and, as if not content with their destruction, it frequently continues to torment its victim with such pain that he urgently calls for removal of the globe.

As in all diseases whose progress is attended by unalterable organic change, the early period, that in which the general practitioner is usually consulted, is the hopeful one for treatment.

It is a common experience to meet with no inconsiderable number of cases of glaucoma in which its peculiar symptoms have led astray both patient and practitioner to such an extent that an eye has been either lost or been greatly damaged. It is also easy to diagnose glaucoma, if its possible existence be kept before the mind in the presence of certain symptoms which tend rather to draw the attention from, than to, the eye. The eye is less likely to be overlooked in the chronic forms than in the more acute.

The eye is an organ whose sensitive nerve supply constitutes a portion of a nervous trunk which sends branches to a great part of the same side of the head and face, and has close central relationship with other nerves proceeding to different parts of the body. Given a great irritation of the ocular portion of the trigeminus, its action is apt to be transferred to some or all of the remaining sensory fibers of the nerve, with the result that the pain originating in the interior of the eye is felt with equal severity elsewhere; teeth, forehead and ear. It is thought to be toothache, rheumatism, neuralgia or even erysipelas: When associated, as it not unfrequently is, with vomiting, it is called migraine. Such illusions are still more probable and the physician less likely to correct the patient, when the pain extends still further and is felt in the region of the shoulder.

In "simple" or very mild chronic cases a gradual diminution in visual acuity is the main cause of complaint, and the attention is not likely to be diverted from the eye as in acute cases. On the other hand, error may arise in diagnosis, first, on account of this mildness, for in an eye which presents to outward inspection little deviation from the normal, the proper appreciation of the case is not unlikely to be postponed or altogether overlooked. From the most insidious and quietest, with little or no sign of inflammation, and taking perhaps years to develop, there is an unbroken chain of connecting cases extending to the most sudden and severe form, attended by excruciating pains

and producing blindness in a time, limited to hours or even less. Though the chronic form should also be borne in mind, the typical symptoms of glaucoma for which we should be on the outlook are chiefly—besides impaired vision, pain in eye, head and face, halos or rainbows seen by the patient, round artificial lights, a variable amount of congestion of the eye and haziness of the cornea; a diminution in the distance between the cornea and the iris as compared with the healthy eye, an enlarged pupil, comparatively irresponsive to the stimulus of light, in which may often be observed the greenish coloration, not, however, peculiar to glaucoma, but from which the disease originally took its name and most important of all, a heightened tension of the globe, felt when it is palpated, through the upper lid, between a finger of either hand, the patient looking down.

Difference in eye tension is always pathological. Every medical man should make himself familiar—a simple matter—with normal, in order to appreciate abnormal, tension. It is the belief most generally accepted, that even in chronic cases in which it is sometimes hard to distinguish increase of intraocular pressure, the latter is yet the *fons et origo* of all that makes glaucoma. It is evident that just a certain quantity of fluid in the eye, no more and no less, will suffice to keep the tension normal; too little, and the eye will tend to become soft, wrinkled and collapsed; too much, and the delicate structure of its interior will be stretched, compressed and injured.

In considering the question of intraocular pressure it is at once evident that an excess of fluid may exist within the eye because too much has entered it, because too little has left it, or from a combination of these causes. Mackenzie of Glasgow was the first to observe increase of tension, and in 1830 he showed its connection with glaucoma in his famous work on diseases of the eye. Advanced age and smallness of the eye are separately predisposing causes of glaucoma and in a large majority of cases these are found combined. It will oc-

cupy only a moment to consider how fully an increase of intraocular pressure can account for all the symptoms. Pressure on the sensory nerves of the eye and transference of the sensation to other branches of the same nerve or to other nerves cause pain in the eye and elsewhere. Pressure produces the halos or rainbows through edema of the cornea, the result of interference with circulation, which corneal haze, along with the effects of pressure on the main trunk of the optic nerve, as well as on the nervous and vascular structure of the retina and choroid, accounts for the diminished visual acuity, acting upon the veins in their passage through the ocular walls the pressure produces the pink zone of enlarged, vicariously employed vessels, seen around the cornea.

We have noticed how the anterior chamber is shallowed, an explanation which holds good also for the large and more or less immobile pupil, while of the internal changes in the eye, the only one which need be mentioned is the well-known glaucomatous cupping of the optic disc, the weakest part of the walls and that which first or alone gives way and yields outwards before the pressure, from which ultimately results a true and incurable atrophy of the nervous filaments. As regards treatment, the author warns against the indiscriminate use of mydriatics, especially atropine and cocaine, in affections of the eye. Glaucoma has often resulted from the use of belladonna, and is almost always accentuated by it; in most ocular diseases it is harmful and the non-specialist would do well to cut this drug from his list in ophthalmic practice, except when convinced that he is dealing with an uncomplicated inflammation of the cornea or iris. On the other hand, he has in myotics, and notably in eserine and pilocarpine, a fairly certain means of temporarily benefiting many cases of glaucoma and so saving valuable time until the most suitable method of treatment can be decided on.

The author concludes with a few words about the differential diagnosis of glaucoma. The injection of the

white of the eye in ordinary uncomplicated conjunctivitis is limited to the conjunctiva, and the engorged vessels move along with that membrane when it is rubbed over the sclerotic. The pupil is also unaffected.

The glaucomatous corneal haze might, on a hurried examination, be mistaken for superficial or interstitial keratitis, but the real corneal difference, the normal tension and condition of the pupil, which is apt to be contracted in corneal inflammation, should be sufficient guides.

In iritis there may be slight increase of tension, but the pupil is contracted and the iris tissues are changed in color and texture, while the anterior chamber retains its normal depth. Evidences of adhesion between the lens capsule and iris on dilatation of pupil will confirm the diagnosis.

POST-NASAL ADENOID HYPERTROPHY, WITH
ESPECIAL REFERENCE TO THE IMPORT-
ANCE OF ITS EARLY RECOGNITION
BY THE FAMILY PHYSICIAN.

In an interesting paper in the *Laryngoscope* for July, 1896, Dr. J. E. Schadle of St. Paul, Minnesota, discusses post-nasal adenoid hypertrophy. Post-nasal adenoid hypertrophy is a disease of the naso-pharynx, a cavity embodying important anatomical and physiological relations as the mechanism of respiration and audition. Communicating with the nose, throat and ears and contributing to their functionary powers, the abnormal naso-pharynx exercises morbid influences over these associated cavities, which impair their usefulness and not infrequently produce organic changes. The disease is one peculiar to childhood. It prevails in all countries (Meyer). The physician who assists at the infant's birth and prescribes for it through its early life should especially be able to recognize this abnormal condition of the post-nasal space, for undoubtedly to adenoid vegetations are due many of the nervous and nutritive disturbances of the young.

During the past fifteen years nose and throat specialists have been the only contributors to the literature of the subject, and none will question the ben-

efit humanity is deriving from their work along these lines. In recognition of this fact a forcible argument is furnished in the present movement among laryngologists to raise funds for the purpose of erecting a monument to the memory of Dr. Wilhelm Meyer of Copenhagen, to whose investigations and teachings we are indebted for much of what is now known of the malady. Post-nasal adenoid hypertrophy is not infrequently attended by serious and formidable consequences. Prominent among these is obstruction of the nose. Through respiratory interference deficient oxygenation of the blood results, establishing a process of carbon dioxide poisoning, impairing nutrition and inducing anemic conditions from which recovery is sometimes protracted, even after the function of nose-breathing has been fully restored. The cause of chronic otorrhea in the child in the majority of cases can be found in the existence of adenoid vegetations. Inflammatory states of the tissue, brought on by exposure to temperature changes or to the exanthematous diseases, generally give rise to catarrhal disease of the middle ear, which may eventuate into a persistent otorrhea or mastoid complication. They also prevent perfect ventilation of the drum. Defective hearing in the young wholly depends on this condition.

Laryngismus stridulus, or spasm of the larynx, an affection which suddenly manifests itself in the night, causing alarm and disturbing the child, is, no doubt, an effect of the occlusion of the nose, the larynx becoming hyperemic, dry and irritable in consequence of mouth-breathing. Choreiform movements of the soft palate have been, in a few cases, a reflex phenomenon of the post-nasal vegetations. Alterations of the voice and laryngeal, bronchial and nasal catarrhal inflammations may arise from the same source and produce an infinite amount of annoyance. Atrophic rhinitis, I believe, is often superinduced by the disease when the systemic conditions are favorable. Thoracic deformity and imperfect pulmonary aeration are frequent damaging

consequences. Wry-neck has been traceable to its reflex cause to adenoids. Nocturnal incontinence of urine is an occasional accompanying occurrence. Not only the physical, but also the mental, growth of a child is retarded. Instances in which through the agency of inheritance the tuberculous or scrofulous taint is present, the consequences are serious and the struggle for existence difficult.

Children afflicted with adenoids and allowed to go on without obtaining relief are certain to fall below that measure of health and strength to which they would else have attained. They grow up sickly and feeble and the event is looked upon as a visitation of Providence. The severer forms will tell on their whole future existence—growth will be stunted, energy will be deficient, maturity will be less vigorous than it ought to have been and success and happiness in life will be hindered. Their ultimate physical powers and their efficiency as men and women will inevitably be more or less diminished by it.

Can all this consequent injury be obviated? It can by an early recognition and removal of the trouble. Due either to ignorance, negligence or prejudice, very generally the family physician himself is responsible for the development of the disease whose effects we see are mischievous and far-reaching. To advise that the child will outgrow the difficulty is criminal, though it be known that after the period of adolescence atrophy of the gland may take place. The lymphoid mass, also known as the pharyngeal or "third" tonsil, when microscopically examined, is found to be a retiform network of connective tissue, which is filled with lymph corpuscles. The growths are richly supplied with blood-vessels and are covered with ciliated epithelium, resembling more or less the mucous membrane from which they take their origin. The clinical signs or physiognomy of post-nasal vegetations are characteristic and unmistakable. The open mouth, the pinched nose, the drawn-down inner canthi, the elevated eye-

brow, the corrugated skin of the forehead, the distorted chest, the apparent mental deficiency, the altered or "dead" voice and the defective general development, evidence the presence of the trouble. Some one has said "It is babyhood that has made man what he is." This important period of life should then be respected and the infant struggling for existence should have all avoidable obstacles removed which may tend to interrupt the process of development. Occasions sometimes present themselves when the child at its mother's breast is unable to perform the function of taking food, in consequence of the embarrassed nasal respiration dependent upon the presence of post-nasal vegetations. The medical adviser, under such circumstances, should look beyond the frenum of the tongue for the cause of the impediment.

By posterior rhinoscopy, or by the insertion of the forefinger into the post-nasal space, the diagnosis is easily made. Seen by the aid of the mirror, various forms of the growths appear. Not infrequently they are observed to obscure the greater part of the posterior nares, septum and Eustachian tubes. A single growth or red lymphoid mass hanging down from the vault of the pharynx is all that can be seen in most cases, while others consist of excrescences, aggregated or separated, covering the roof. In the examination of children the employment of the mirror is not at all times practical. When this is the case, no better method than the use of the index finger presents itself.

When touched, the sensation has been described as that of a "bag of worms," which, on manipulation, is frequently followed by slight hemorrhage. The treatment is surgical, differing only in the methods employed. When feasible, excision should be done under illumination, because the outlines of the tumors are thus brought into view, whereby the operator is enabled to use his instrument with greater precision. Should it be a snare, the adjustment of the wire loop around the mass is made more easy; a post-nasal cutting forceps, the adjacent structures remain uninjured;

or a curette, the mucous membrane of the posterior wall of the naso-pharynx escapes being stripped from its attachment, a circumstance liable to occur when the operation is in the hands of a novice. Cocainizing the parts and drawing forward the soft palate with either hook or tape, the operation is made both easy and satisfactory. If, owing to nervousness or fear, the patient is not able to co-operate with the surgeon, then a general anesthetic (chloroform being preferable) should be administered. The anesthesia should not be carried to complete narcotization, for the reason that the laryngeal reflexes ought to be preserved in order to obviate serious trouble which might come from blood or other foreign matter finding its way into the larynx. The patient with gag in mouth is now placed on the operating table, face downward and head inclining over its edge.

This position allows gravity to take care of the blood, the flow of which for the moment is profuse, by causing it to escape from the nose and preventing its diversion toward the throat or stomach. Observing thorough asepsis of the hands and having the nail neatly trimmed to an oval point, hardened by previously immersing it for a few minutes in alcohol, the forefinger of the operator is introduced into the post-nasal space, care being exercised at the same time that the soft palate is not rolled up in front of the finger and bruised. Commencing in the median line of the vault at the septum, and gradually working to either side, the growths are detached and broken up. If thoroughness is practiced, relief is sure to follow. Occasionally it happens that a second attempt at removal with the finger nail is required, especially when the vegetations are largely composed of connective tissue. Infants whose sensibilities are not acute do not need an anesthetic, because the lymphoid nodules can be readily detached without producing much discomfiture. But little after-treatment is necessary. It should be noted that in children in whom the adenoids are large and the accompanying symptoms pronounced, complete recovery may be slow. The open mouth

may remain so, or for an indefinite period at least, in consequence of the apparent paresis of the orbicularis oris muscle.

* * *

FISHBONES IN THE PHARYNX. — Dr. M. F. Weyman gives in the *Medical Herald* the following directions for removing fishbones from the pharynx.

1. Fishbones, which become fixed in the pharynx, almost invariably insert themselves in the lateral walls of the pharynx, a little above the aryepiglottic fold.

2. They are usually thin short bones with sharp ends.

3. They are usually deeply driven into the tissues.

4. Inspection by means of the laryngoscopic mirror is not, as a rule, successful.

5. They should be located by digital examination, the throat having been rendered insensible by cocaine.

6. The easiest way of extraction is by means of a Toynbee polypus forceps (or a forceps of a similar curvature), the point of which should be guided along the index of the exploring hand, the tip of that index to be in touch with the foreign body.

7. After extraction of the bone, the sensation of the presence of a foreign body may persist, but disappears usually after twenty-four hours.

8. The location of the bone can ordinarily be pointed out by the patient by a point of tenderness on the skin and opposite the injured internal area; this spot lies immediately below the angle of the lower jaw, the place indicating at once on what side the bone must be looked for.

* * *

THE JAPANESE INTESTINE.—Finding rice was better utilized by the Jap than the European, says the *Medical Recorder*, it occurred to Dr. Scheube of Kioto that some radical difference in the intestinal anatomy might supply the explanation. Professor Taguchi, after measuring the intestines of twenty-five cadavers at Tokio, now asserts that, after making proper deductions for variations in stature, the Japanese intestine is one-half longer than that of the European.

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BALTIMORE, FEBRUARY 13, 1897.

THE Conference of Health Officers from Baltimore and all parts of the State to be held next week promises *The Sanitary Conference*. to arouse general interest and to give practical results. The idea of this work grew out of the Committee of Hygiene, of which Dr. Edward M. Schaeffer is chairman, appointed by the Faculty, and the State Board of Health, which has done such active work of late.

The programme, which is full and varied, will attract a large number of persons, both lay and medical, and the discussions will probably enlighten the dense ignorance which still prevails in some parts of the rural districts and which has been the cause of the spread of such diseases, especially diphtheria and typhoid fever. The programme, which may possibly be slightly varied during the session, is about as follows:

Conference of Health Officers, February 17 and 18, 1897, in the Hall of the Medical and Chirurgical Faculty of Maryland, 847 North Eutaw Street, Baltimore.

Programme, Wednesday, February 17, 1897. Day Session, 11 A. M. to 3 P. M. His Excellency, the Honorable Lloyd Lowndes, Governor of Maryland, Honorary Chairman. Invocation, Most Reverend James Gibbons, Cardinal and Archbishop of Baltimore. Address of Welcome, Dr. Wm. Osler, President of the Medical and Chirurgical Faculty. Acknowledgement, Dr. S. Chase de Krafft, President of the State Board of Health.

Vital Statistics: 1. Paper, Dr. John S. Fulton, Baltimore; 2. Paper, Dr. Charles S. Mattfeldt, Catonsville; 3. Paper, Funeral Regulations for Rural Districts, Dr. Joseph R. Hunt, Laurel; 4. Should Physicians be Paid for Returns of Births, Deaths and Diseases? Dr. George H. Rohé, Sykesville. Discussion.

Evening Session, 8 P. M. to 10 P. M. Honorable Harry M. Clabaugh, Attorney General of Maryland, Presiding.

Diphtheria: 1. Bacteriological Demonstration of Diphtheria, Dr. William Royal Stokes, Baltimore; 2. Clinical and Bacteriological Diagnosis of Diphtheria, Dr. Wm. H. Welch; 3. Personal and Domestic Prophylaxis, Dr. John D. Blake; 4. Quarantine, Isolation and Disinfection, Dr. James F. McShane; 5. Relation of Schools to Spread of Diphtheria, Dr. John S. Fulton. Discussion.

Second Day Session, 11 A. M. to 3 P. M. Thursday, February 18, 1897. Dr. D. C. Gilman, President of Johns Hopkins University, Presiding.

Typhoid Fever: 1. Demonstration of the Pathology and Bacteriology of Typhoid Fever, Dr. Simon Flexner, Baltimore; 2. Demonstration of the Bacteriological Examination of Water, Dr. Wm. Royal Stokes, Baltimore; 3. Demonstration of the Chemical Examination of Drinking Water, Prof. W. B. D. Penniman, Baltimore; 4. The Diagnosis of Typhoid Fever, Dr. Wm. Osler, Baltimore; 5. Typhoid Fever in Chestertown, Dr. W. Frank Hines, Chestertown; 6. Sources and Spread of Typhoid Fever in the Country, Dr. Thomas B. Owings, Ellicott City; Sanitary Survey of Towns and Villages for the Prevention of Typhoid Fever, Dr. James H. McCormick, Gaithersburg; What the Country Doctor Can Do to Prevent Typhoid Fever, Dr. August Stabler, Brighton; 9. Water Supply and Sewerage, Dr. James F. McShane. Exhibition of Charts and Diagrams. Discussion.

The Members of the Conference are invited, after adjournment, to lunch at the Baltimore Medical College. The use of the laboratories and the services of the demonstrators are offered to those who wish to repeat any observations made at any session of the Conference.

THE Frick and Johnson endowment of the Faculty Library has enabled the library committee of the Faculty *The Faculty Library.* to buy many new books and also to add complete sets of important works. The following have been put on the shelves in the past few weeks:

Musser, J. H., Medical Diagnosis; Wood, H. C., and Fitz, R. H., Practice of Medicine; Tyson, J., Practice of Medicine; Foster, F. P., Reference Book of Practical Therapeutics; Knight, G. D., Movable Kidney and Intermitting Hydronephrosis; Balley, J. B., Diary of a Resurrectionist, 1811-1812; Cabot, R. C., Clinical Examination of the Blood; Treves, F., and Lang, H., German-English Dictionary of Medical Terms; Brockbank, E. M., On Gall-Stones; or, Cholelithiasis; Dalby, Sir W. B., Aural Surgery; Foxwell, A., Enlarged Cirrhotic Liver; Goodall, E. W., and Washbourn, J. W., Manual of Infectious Diseases; West, C., Profession of Medicine; Its Study, Practice, etc.; Billroth, T., Briefe; Ziegler, Text-Book of Special Pathological Anatomy; Translated and Edited by D. MacAlister and H. W. Cattell; Ziegler, E., General Pathology; Twentieth Century Practice of Medicine, Vol. X. Diseases of the Nervous System; Busey, S. C., Souvenir, with Autobiographical Sketch of Early Life; Braithwaite's Retrospect of Medicine, Vol. CXIV, 1896; Albert, E., Diagnostik der Chirurgischen Krankheiten; Snell, E. H., Compressed Air Illness; Holt, L. E., Diseases of Infancy and Childhood.

SOME surgeons think they are undeserving of their calling unless they can point with pride to case books *The Craze for Operating.* filled with the records of operations and jars filled with various organs, while too often graves are filled with their patients.

It is not so much the technical skill and the modern instruments that make a surgeon celebrated as it is his good judgment and

ability to forecast a prognosis which shall stand after the operation. It is well-known everywhere that many unnecessary operations are done, organs removed and exploratory laparotomies performed partly for the patient's good and partly to add to the surgeon's statistics.

An item is going the rounds of the medical press to the effect that a man who is in constant fear of becoming unconscious on the street and being carried to a hospital and operated on before a diagnosis has been made, wears sewed in a conspicuous place on his underclothes the inscription: "My appendix has been cut out," thus insuring himself against an operation for appendicitis.

This is probably the invention of some witty newspaper man, but it has its moral. Operations for diagnosis should not be undertaken without the best counsel and then not without some deliberation.

WHATEVER the nature of the influenza organism is, it most certainly flourishes when the vapor of melting snow *The Grippe Again.* fills the air and the sun is covered by clouds. The Health Department of Baltimore reports almost twice as many deaths for this past week as for the week before and this increase is found to be largely due to diseases of the air passages. Bronchial troubles of all kinds and pneumonias are rife, and consumptives find life slipping away from them in the days of chill and widely varying temperature.

Baltimore has always been the center of brick manufacture and as this commodity is rather cheaper here than elsewhere, it has been utilized to a large extent for sidewalk paving. Any one who has noticed the life of snow on a brick and a stone or concrete pavement may notice how long the bricks hold the snow and how the porous clay holds the moisture.

Snow melts rapidly on a stone and asphalt pavement and when the sun shines, that kind of pavement is soonest dry. When the rains and snows are not wetting the bricks the householder is allowing the servant to soak the bricks with water. Thus Baltimoreans have damp sidewalks a large part of the day.

A reform in sidewalk paving and washing is needed in a city where lung troubles add so materially to the mortality.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 6, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		23
Phthisis Pulmonalis.....		29
Measles.....	1	
Whooping Cough.....	3	1
Pseudo-membranous Croup and Diphtheria. }	29	8
Mumps.....	7	
Scarlet fever.....	21	
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	2	2

The Indian government has mounted nurses.

The Flint Club held its regular banquet last week.

Dr. W. D. Burfoot, a well-known Richmond physician, is dead.

Reading, Pa., physicians will have a new medical library.

Dr. H. O. Reik has removed his office to 5 West Preston Street.

The New York Polyclinic, lately destroyed by fire, will be rebuilt.

The International Congress of Psychologists will meet in Paris in 1900.

During the past ten years over 600 papers have been written on the tonsils.

The Hospital for Consumptives has re-elected its old staff for the ensuing year.

The Japanese intestine has been ascertained to be one-half longer than that of the European.

A coroner's jury censured the New York Board of Health for licensing midwives without an examination.

Two medical students have run foul of the law in attending two cases of diphtheria in Chicago, both children having died.

The American Society of Superintendents of Training Schools for Nurses had a successful meeting in Baltimore the past week.

Lister will be called Lord Lister. He may visit America to attend the British Medical Association at Montreal, next summer.

A German observer points out that by the use of the X rays, brick dust can be traced in Cayenne pepper sand in spices, and chalk in flour.

The fourth annual meeting of the Associated Health Authorities of Pennsylvania was held at Harrisburg on January 25 and 26.

New York boasts of a Flannel Shirt Club to clothe discharged patients. Baltimore has for years had a Cutting Out Club and Hospital Clothing Club.

The Queen of England has appointed Mr. Rickman John Godlie, F. R. C. S., Surgeon to the Household in Ordinary to her Majesty in place of Sir Spencer Wells, resigned.

Meeting of the Western Ophthalmological, Otological, Laryngological and Rhinological Association: Second Annual Meeting, St. Louis, Missouri, April 8, 9, 1897. Place of meeting, Planter's Hotel.

An exchange says that in over 200 operations for appendicitis only two fruit seeds were found in the appendix. Therefore, we may continue to swallow our peach stones, cherry pits and hickory nuts without fear.

The chairs of Anatomy, Clinical Surgery and Genito-Urinary Surgery are vacant at the Medico-Chirurgical College of Philadelphia. Only the chair of Anatomy is salaried. All applications should be addressed to Isaac Ott, dean.

Raleigh is to have the first free dispensary in the State of North Carolina. It will be opened at an early date in connection with the schools of medicine and pharmacy of Shaw University. It will furnish free advice and medicine to the needy and deserving colored people.

Electricity will serve to alleviate as well as to increase the horrors of war. The members of the ambulance corps in the French army have been provided with a means for the succor of the wounded at night on the battlefield. Each man of the relief corps will wear a little incandescent lamp in his hat, the current being produced by a small primary battery in his pocket. The wounded will be on the lookout for these electric Jack-o'-lanterns, and doubtless many lives will be saved by the quick assistance given.

Book Reviews.

INTERNATIONAL CLINICS. Edited by Judson Daland, M. D., J. Mitchell Bruce, M. D., F. R. C. P., David W. Finlay, M. D., F. R. C. P., etc. Volume III. Sixth series: 1896. Octavo, pp. xii—344. Philadelphia: J. B. Lippincott Co. 1896.

International Clinics contains a series of clinical lectures, some good and some very poor. They evidently found favor as the publication has continued for several years. There is nothing especial that can be said of this volume. It is attractive and contains a variety of matter, in places rather diffuse, but on the whole very good. Drs. Thomas S. Latimer and Wm. H. Welch of Baltimore unite in one lecture.

BACTERIOLOGICAL AND ANATOMICAL STUDY OF THE SUMMER DIARRHEAS OF INFANTS. By William D. Booker, M. D., Clinical Professor of Diseases of Children, Johns Hopkins University; Physician-in-charge of the Thomas Wilson Sanitarium for Sick Children. Reprint from the *Johns Hopkins Hospital Report*, Volume VI.

This is the second important publication of Booker on this subject and from it he has worked out a remarkable monograph. He tabulated and studied thoroughly all the cases of diarrhea and drew important conclusions as to the prevention and treatment. The author has worked long and faithfully on this subject and what he says should be received with the greatest confidence.

REPRINTS, ETC., RECEIVED.

A Clinical Study of Twenty-One Thousand Cases of Diseases of the Ear, Nose and Throat. By Seth S. Bishop, M. D., Chicago. Reprint from the *Journal of the American Medical Association*.

The Management and Treatment of Tuberculosis in the Asheville Climate. By James A. Burroughs, M. D., of Asheville, N. C. Reprint from the *North Carolina Medical Journal*.

Suspensio Uteri, with Reference to its Influence upon Pregnancy and Labor. By Charles P. Noble, M. D. Reprint from the *American Journal of Obstetrics*.

Prevention of Tuberculosis. By E. B. Borland, M. D. Reprint from the *Journal of the American Medical Association*.

Current Editorial Comment.

TYPHOID FEVER NURSING.

Medical Fortnightly.

THERE is perhaps no disease which requires more constant attention, patient watching and really hard work than nursing a typhoid patient. From experience as physician, nurse and patient, the writer believes that the nursing of the typhoid fever patient is the most important part of the battle. The many anxious days, the long hours of the night, and the protracted weeks, sometimes, of convalescence, require surveillance on the part of the nurse, which if assiduously carried out, give credit to a service which none can appreciate except those with experience.

SECRET REMEDIES.

Medical Standard.

IN all the wide realm of reputable medicine, there should be no shelter for a "remedy" which prates so loudly of its virtues while it conceals its identity under an assumed name and masquerades in a false disguise. Fanciful titles may be excused on the plea of commercial expediency or necessity in the identification of a given maker's products and in their protection against degrading substitutes or imitations, but no such plea can avail in justification of secrecy of composition. Superiority in quality is entitled to all possible protection, but secrecy of composition as certainly merits unqualified condemnation.

THE GENERAL PRACTITIONER.

Medical Review.

IT was rather a remarkable coincidence that two of the orators at the recent semi-centennial of the Academy of Medicine, in their efforts to touch upon subjects of vital interest to a general audience, should speak of the present and much-neglected claims of the general practitioner. President Cleveland, in sounding the praises of the old-school doctor who met all the emergencies of treatment in the last generation, implied a personal feeling of regret that the trustworthy and practical man, ready for every ordinary sickness, had virtually passed away with the times in which he had so usefully lived and had so prosperously thriven. Dr. Jacobi, in a more direct way, speaking for the actual needs of the medical practice of today and giving specialism its due meed of praise, expressed himself strongly in favor of reinstating the all-around man.

Publishers' Department.**Society Meetings.****BALTIMORE.**

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY**. Meets 3d Tuesday in each month. 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN EIDOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC**. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY**. Meets 1st Monday in each month. N. P. BARNES, M. D., President. W. F. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY**. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

THE quality of endorsements given to Tyree's Antiseptic Powder are such as to stamp it as a preparation of unquestionable merit for the various forms of leucorrhea. Scarcely an article on this subject is being written or discussed in the medical societies but what reference is made to this preparation. Surely this is a commendable sign.

DIET is vital in diabetes. Bread from ordinary white flour aggravates the disease in spite of medicine, and bran bread and other substitutes are so unpalatable and expensive, patients cannot use them with satisfaction. Physicians find this a serious drawback in their practice. For this reason we are glad to remind the medical profession of the "Special Diabetic Flour" made by Farwell & Rhines, of Watertown, New York, which seems to have general and hearty endorsement wherever tried. The makers believe in their goods, hence their liberal offer of free baking samples. Write them for particulars regarding this and other valuable sanitary flours for dyspepsia, constipation and obesity, and the new diuretic "Barley Crystals."

It is both interesting and surprising to observe the skill and ingenuity displayed in the making of artificial limbs as seen in the products of some manufacturers in this line. In taking up the catalogue of the greatest artificial limb manufacturers in the world, that of A. A. Marks & Co., one may see illustrated and described all sorts of artificial devices which serve as most satisfactory substitutes to those who have by accident or other misfortune been deprived of hand, foot, arm or leg. For instance, no matter how short a man's stump may be, the new rubber foot, which has proved so pronounced a success, enables him to walk with little exertion and is helpful in every respect. Then there are the rubber hands with ductile fingers by means of which a fork, knife or brush can be held with firmness and the utility of the hand greatly enhanced. The subject of the importance of applying artificial limbs to young and growing children is treated in the publication, also much else of interest. Write to A. A. Marks of New York, for a copy, mentioning this JOURNAL.

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Original Articles.

THE IMPORTANCE OF LABORATORY METHODS IN DIAGNOSIS.

By Charles E. Simon, M. D.,
Baltimore.

SIXTH PAPER.

The diagnosis of typhoid fever.—The diagnosis of typhoid fever is, as is well-known, not infrequently a most difficult problem. In large hospitals cases may be observed almost daily, where from the clinical history and the results of a physical examination alone, it would practically be an impossibility to establish a definite diagnosis. When the disease sets in with severe nervous symptoms, it is frequently mistaken for cerebro-spinal meningitis. What at first appeared to be a case of acute croupous pneumonia may, in the course of time, turn out to be typhoid fever.

Remittent fever is again and again confounded with typhoid fever. The great difficulty of differentiating acute miliary tuberculosis from typhoid fever is well-known. With the exception of the rose-colored rash, there is not a symptom of typhoid fever which may not also be met with in other acute febrile diseases. The rash, moreover, is not always present and rarely appears before the seventh day. After the middle of the third week it is only found in exceptional cases. The ascending pyrexia in the earlier days of the disease is not always so well pronounced, as is stated in the text-books, and in hospital practice the patients are frequently not seen

before the end of the first or about the beginning of the second week.

Widal's serum test.—To judge from the reports which have thus far been published, it is now possible to diagnose typhoid fever with accuracy in the clinical laboratory. The method is based upon the discovery of Widal that the blood serum of typhoid fever patients possesses the property of inhibiting the movements of the specific bacilli in bouillon culture and of causing their agglutination. By means of a sterilized hypodermic syringe 5 to 6 cc. of blood are obtained from the median basilic vein and placed in a sterilized test-tube, measuring from 10 to 12 cm. in length. The blood is allowed to stand until the serum has separated from the clot. This may be hastened by separating the coagulum from the walls of the tube with a sterilized platinum needle.

By the aid of a sterilized glass pipette eight drops of the serum are best added to 4 cc. of nutrient bouillon, which should be as nearly neutral in reaction as possible. This mixture is then inoculated from a bouillon culture of the typhoid bacillus, 24 hours old, and kept at a temperature of 37°C. (98½°F.) for 24 hours. At the end of this time the bouil-

lon will be absolutely clear, or very nearly so, while little flakes, composed of the bacilli, will be seen at the bottom and adhering to the sides of the tube, providing that the case under consideration is one of typhoid fever. Otherwise it will be observed that the bouillon is uniformly cloudy, and that a sediment proper does not occur.

In some cases the appearance of the bouillon is peculiar. Innumerable macroscopic, dust-like particles will be seen throughout the fluid, which, however, can be readily distinguished from the cloudy appearance of non-typhoidal specimens. It is thought that this result is obtained in cases of intense infection with the bacterium coli. Should any doubt arise it is only necessary to keep such tubes for a few hours longer at a temperature of 37° C. (98½° F.) when it will be seen that the dust-like aspect has disappeared and has given place to the ordinary cloudy appearance observed in cases which are not typhoid fever.

Widal suggests that a microscopic examination be also made in every instance. This is not necessary; the macroscopic test is perfectly sufficient. If a drop of the mixture be examined with an oil immersion lens, pretty large heaps of agglutinated, motionless bacilli will be found evenly scattered throughout the field of vision, while the interspaces are either entirely free from bacilli, or very nearly so. This appearance is only found in cases of typhoid fever.

Unfortunately this method, while it appears to be entirely reliable, and while it is certainly simple enough in itself, will scarcely become popular among practitioners, as a fresh culture of the typhoid bacillus must be available. In Baltimore such examinations are fortunately made for the general practitioner by the bacteriologist of the Health Department and it is to be hoped that every physician will make use of the opportunity in doubtful cases. He should, however, make every effort to reach a correct diagnosis himself. To this end the blood should be examined for the presence of malarial organisms,

as described in a previous paper, as this disease is, in our latitudes, more frequently mistaken for typhoid fever, and *vice versa*, than any other. The urine, moreover, should be tested according to Ehrlich's method.

Ehrlich's reaction. — Two solutions, which should be kept in separate bottles, are necessary. The one should contain 50 cc. of hydrochloric acid, diluted to 1000 cc. with water and saturated with sulphanilic acid. The other is a 0.5 per cent. solution of sodium nitrite. Forty cc. of the sulphanilic acid solution are treated with 1 cc. of the sodium nitrite solution, when the mixture is thoroughly shaken. A test-tube is then filled to one-third its capacity with the urine to be examined and mixed with an equal volume of the reagent. One to two cc. of ammonia are then added by means of a pipette, so as to form a layer above the mixture. At the zone of contact a more or less pronounced orange ring will be observed if the urine employed was normal.

Under pathological conditions, and notably so in typhoid fever, a distinct carmine color is seen instead. This reaction, when first discovered, was thought to be absolutely pathognomonic of typhoid fever. Later researches, however, have shown that it is at times also obtained in other diseases. It has thus been observed in cases of measles, scarlatina, erysipelas, acute miliary tuberculosis, severe pneumonia, smallpox, phthisis, septicemia, etc. In all these diseases, however, the reaction is by no means constant, and the great majority can be readily distinguished from typhoid fever. The only two diseases which concern us, in which the reaction may be obtained and which may be confounded with typhoid fever, are pneumonia and acute miliary tuberculosis. In the former the reaction is only exceptionally observed and if we remember that a marked degree of hyperleucocytosis is practically the rule in pneumonia, while the number of leucocytes varies but little from the normal standard in typhoid fever, it will rarely be difficult to differentiate the two diseases from each other. In acute miliary

tuberculosis this is more difficult if the patient does not come under observation during the first two weeks. If, however, the patient is seen in this time, a positive reaction may probably always be regarded as indicating the existence of typhoid fever. In cases of acute tuberculosis the writer has never met with the reaction earlier than the beginning of the third week. In such cases, moreover, it generally persists to the fatal end, while in typhoid fever it is rarely observed after the twenty-first day of the disease.

It is true that the reaction is not always present, even in typhoid fever, but such cases are exceptional and always mild. In almost all cases it may be obtained as early as the fifth day and it is the writer's experience that a positive reaction between the fifth and the ninth day, when taken in conjunction with a negative examination of the blood and sputum, may be regarded as indicating the existence of typhoid fever. Its value as a diagnostic aid is certainly greater than that of the rose-colored rash.

In this connection the writer wishes to draw attention to a slight modification of the test which he regards as most valuable. If any doubt should arise as to the presence or absence of the reaction, *i. e.*, as to the color of the ring, the test-tube should be emptied into a porcelain basin, filled with water. The reaction may then be regarded as positive if the water is colored a distinct salmon-red, while an orange color

only is obtained if the reaction is negative.

Leucocytosis.—It has been mentioned above that in typhoid fever the number of leucocytes is practically normal, *i. e.*, there are about 6000 in the cb. mm. of blood. By remembering this fact we are not only placed in a position where we can differentiate typhoid fever from other diseases in which a typical hyperleucocytosis (increased number of leucocytes) is observed, but we can also detect the occurrence of special complications of an acute inflammatory character. An examination in this direction is hence likewise of great importance.

To the practitioner who cannot avail himself of special laboratory facilities the writer would suggest that in every acute febrile disease where the diagnosis is not clear at once, the blood be carefully examined for malarial organisms and the urine be tested daily according to Ehrlich's method. A correct diagnosis may then be reached in the great majority of cases and the rate of mortality from "pernicious malarial fever" lowered. An examination of the sputum for tubercle bacilli and an enumeration of the white corpuscles of the blood will further serve to differentiate the disease from phthisis and septic conditions respectively. For the country physician it would be most important to establish a State bacteriological and chemical laboratory where specimens could be sent for examination. Returns could be supplied within forty-eight hours.

FOUND DRUNK.

THE *Boston Medical and Surgical Journal*, in describing the treatment of "drunk" cases, says that when the police in Denmark find any one in the streets drunk and incapable they take him in a cab to the station, where he gets sober under a surgeon's care. On recovering sobriety the police take him home. A bill for the services of the cabmen, the surgeon and the police agents for special duty is then presented to the host of the establishment where the patient took his last drink.

In Turkey, if a Turk falls down in the street while intoxicated and is arrested, he is sentenced to the bastinado, which punishment is repeated as far as the third offence. After the third bastinadoing he is considered to be incorrigible and is called "Imperial," or "privileged" drunkard. If arrested after that he has only to give his name and address and state that he is a "privileged" drunkard, when he is released and conducted home, the bill for these kindnesses being rendered to him for payment next day.

THE TREATMENT OF SYPHILIS.

By Henry Alfred Robbins, M. D.,
Washington, D. C.

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 7, 1896.

THIRD PAPER.

THIS colored man, aged 35 years, who has just entered our service for treatment, gives promise of being a peculiarly interesting case, illustrating the ravages caused by syphilis. To appreciate at a glance what is presented to you, it is necessary to be well versed in syphilography. Unless you have been properly instructed, and as it were have your knowledge at your finger ends, you will in general practice be treating many cases for other diseases, which in reality are only the manifestations of the protean forms of syphilis.

We will ask the patient to walk across the room. You notice that his right arm hangs limp by his side, and that it is with considerable effort he lifts and swings his right knee, with the big toe of the foot pointed inwards.

Syphilis causes genuine apoplectic attacks with succeeding hemiplegia, as you find in this man. Not long ago I read a paper before the Medical Society of the District, in which I gave examples. Dana of New York says that syphilis causes one-third of all cases of apoplexy. There are changes in the cerebral arteries, diminishing their caliber, etc. The brain is also the seat of tumors known as gummata, but it does not require one skilled in brain surgery to remove them.

Dr. Dowse, in speaking of iodide of potassium, says: "The physician commands this drug to carry out his object, and it does it, too, as surely, as completely and effectually as the surgeon's knife in excising a tumor."

You will notice, if you hereafter see much of syphilis, that hemiplegia due to syphilis is nearly always on the right side. Aphasia is not uncommon. This man, however, is not at a loss for words, nor does he make use of wrong ones. He is very complimentary, and very voluble, and has "a pat-you-on-the-

head, and bless-you-my-children" style of oratory. Now observe the eruption on his forehead. It is what is called the ulcerative pustular syphiloderm, the pustules varying in form and color. Some are covered with crusts. My colleague, Dr. Arwine, lifts one with a pin, and you notice a yellowish puriform secretion. The late Professor von Zeissel, whose service I belonged to in Vienna, used to liken this syphiloderm to "little islands floating in their own pus." They are destructive and leave permanent scars.

Of all the various forms of treatment of syphilis, I prefer the Vienna method and that is the inunction. Generally, and always at Vienna, the mercurial ointment is used. When I am sure that I can get the oleate of mercury (10 per cent.) properly made, I prefer that, but unless it is properly and freshly made, it sometimes acts as an escharotic. As we do not have the patient under our own control, to see that the method is properly carried out, we will give him our tertiary mixture, and apply to the forehead on ointment containing calomel $\bar{5}$ j, zinc ointment $\bar{3}$ j.

November 23. This colored girl, aged 25 years, has just put in an appearance for treatment. You find that she has enlargement of the posterior cervical, submaxillary and epitrochlear glands. You notice located on the neck, over the sterno-mastoid region, a large, flat tumor, which she says is painful. If it is what we think, pain is a very unusual accompaniment. To our eyes, and finger ends, it can not be mistaken for anything but a gummy tumor. Any pressure on a cutaneous nerve may cause pain, especially upon the skull, where gummy tumors are occasionally found. In this case we can account for it, by the frequent applications of the tincture of iodine, which have been

made. Some one not well versed in syphilis has mistaken this tumor for an abscess. Why tincture of iodine is always applied to a suspected abscess I can not comprehend. In my hands it has proved worse than useless in aborting a boil or abscess, and no one but an idiot would apply it to a gummy tumor. I have ceased to be astonished at anything after seeing a medical man poultice a gummy tumor, and with a profound air, order syrup of hydriodic acid.

A gummy tumor is the most characteristic manifestation of tertiary syphilis. They rarely develop before the third or fourth year after acquiring the disease. They are met with not only on the tegumentary surface, but post-mortems have revealed them in the brain, heart, lungs, liver, stomach, spleen and kidneys, as I described in a paper called "Syphilis of the Vital Organs."

What is a gummy tumor? It is a cell infiltration in the subcutaneous cellular tissue. After the formative stage under the skin, if not properly treated, it will go on to the ulcerative stage, and sometimes is attacked with gangrene and phagedena.

This case seems easy enough to diagnose, as the girl has enlarged glands, and she says that three years ago she had a sore on her genitals, which was followed by a "waxing kernal."

Gummatous tumors have been mistaken for cancer, and have been removed by the knife. I referred to this in a paper that I read before the Medical Society, entitled "Lues Venerea." I gave examples, and could have given more. Only yesterday I came across a clinical lecture of Professor von Esmarch, in which he stated that an American had consulted him who had "his penis, the scrotum, and the testes, as well as a large piece of the abdominal skin, cut away." Our surgeons of the Pacific slope had regarded the case as carcinoma, and had made as good a eunuch of him as you can find in Constantinople. After castrating him, they fixed him so that the only way he could be re-infected by syphilis

was in a non-venereal manner. Our California surgeons failed to see unmistakable evidences of syphilis, so von Esmarch stated.

What can you expect when syphilology is not considered of sufficient importance to be taught in our medical schools? The very name is so offensive to the ears and eyes of our professors that it is never spoken, and never printed in their catalogues.

The old world makes mistakes too. In my paper "Lues Venerea," I quoted the following from Maissoneuve:

"A patient underwent a serious operation for a supposed encephaloid cancer of the pharynx. After six months the tumor began to grow again, and grew so rapidly that the patient was given up in despair, and sent to the hospital to die. When examined upon his entrance, an enormous tumor was found occupying the left lateral region of the neck and the entire parotid gland. It projected into the pharynx, obliterated the velum palati, and threatened the patient with death by asphyxia. Under specific treatment, the tumor vanished without leaving a vestige."

This morning I received part III of the Pictorial Atlas of Skin Diseases, and Syphilitic Affections—taken from photo-lithochromes of the models in the Museum of the Saint Louis Hospital, Paris.

It contained, among other superb illustrations, a colored photo-lithochrome of a broken-down ulcerative syphilitic gumma of the thigh. This patient was a man aged thirty-nine years.

The patient went to a hospital and was admitted to a surgical ward. He states that the surgeon thought of operating on him, and even auscultated his thigh "to hear pulsations"; so it seems possible that an aneurism was suspected. However, after two surgeons had consulted together, the operation was abandoned, and he was discharged, with means of treatment directed mainly towards his pains (opiates internally, belladonna plaster on the thigh, etc.).

In one month he returned to the hospital, in a worse condition. "A different surgeon from those who first saw him

now attended him. The thigh was now massive and hard, but the skin was purple, the ecchymoses having partially disappeared. Probably the new surgeon diagnosed a malignant tumor—likely enough an osteo-sarcoma—for he proposed to the patient *the amputation of his leg at the hip joint.* Terrified, the patient left the hospital.

"A few weeks afterwards (December, 1890), the poor fellow was sent to the Saint Louis Hospital. The appearance of the lesions, as we have already described them, left no room for doubt as to their nature. Despite the lack of evidence of antecedent syphilis, and denials of the patient, the diagnosis of syphilis was made, and specific treatment instituted. This treatment consisted of daily mercurial inunction (mercurial ointment, four grammes (5i), and of iodide of potassium, of which the patient took at first two (5ss), then three (gr. xlv), and finally four grammes (5i), daily. The disease, which had lasted for two years, was cured in two months.

In my paper (Lues Venerea) I wrote as follows: "Gummy tumors have been diagnosed to be sarcomata, and the ever ready knife of the surgeon brought into use, but the happy administration of the proper treatment has caused them to melt away, like snow under the midday sun." So far I have not been called to account for thus indulging in poetic license.

We will apply the oleate of mercury, ten per cent., to this tumor, and give the girl our tertiary mixture, and when you see her again you will, I suspect, find that the tumor has melted away, without leaving a vestige.

November 25.—This white woman, who appears to be about thirty years old, has brought her girl baby, aged eight months, for us to treat the infant's hand.

Before Dr. Arwine removes the dressings, we will call your attention to the unusual formation of the infant's skull. There is a bulging out of the frontal bone, and a general lack of symmetry. You will notice that its eyes are bright, and there is no evidence of its having

had interstitial keratitis, and the mother says that it has never had ear trouble, and there does not appear to have been an arrest of development. You notice, about the commissures of the lips, little groups of vesicles, which look herpetic. Let us examine the mouth. We see irregular grayish-white patches, which have the appearance of having been brushed over with a solution of nitrate of silver. These are called opaline patches, because they resemble the opal, and they are characteristic of syphilis. On examining the hand, what do we find? A most typical case of what is called dactylitis syphilitica, called so from the Greek word meaning finger.

Nélaton reported two cases about thirty years ago, and ten or eleven years later Dr. R. W. Taylor wrote an essay on the subject in his usual masterly way. The acquired form is very rare. Only five cases had been reported up to the time that Dr. Taylor wrote his paper on the subject. You will observe that the upper phalanges of the index middle and ring fingers appear to be gummatous. They feel gummy and are puffed out more than twice their normal size, and at the end of the index finger there is a deep ulcer, and it looks as if there might be necrosis of the lower phalanx. The doctor is dressing it with iodoform gauze. We will photograph this case, if possible. We will give the little patient $\frac{1}{2}$ grain doses of hydrargyrum cum creta, and will tell the mother to keep its bellyband smeared with mercurial ointment.

Let us question the mother. You notice that she is good looking and apparently healthy. She has had five children, no miscarriages. She says that all have been healthy, except this last one; it had a breaking out, shortly after birth, and the child has constantly had "a cold in the head." She says that her husband is a healthy man, has had no skin trouble, no rheumatism, etc.

As this woman looks so well, we would, if we had time, call your attention to the law of Colles. That is where a healthy woman can give birth to a syphilitic child. Dr. R. W. Taylor has given

examples, where such appears to have been the case. We will refer to that in a lecture, when we do not have to keep

patients waiting. We will investigate still further, and report on some future clinic day.

THE "SCHOTT METHOD" OF GYMNASTICS IN CHRONIC HEART DISEASE.

By Solomon Solis-Cohen, M. D.,

Professor of Clinical Medicine and Therapeutics at the Philadelphia Polyclinic and College for Graduates in Medicine; Physician to the Philadelphia Hospital, etc.

ASSISTED BY

Dr. Charlotte West,

Clinical Assistant in the Medical Department of the Philadelphia Polyclinic.

READ BEFORE THE PHILADELPHIA COUNTY MEDICAL SOCIETY, JANUARY 27, 1897.

THE treatment to which I desire to call attention of the Society is a portion of the so-called Nauheim treatment of cardiac disease, which was inaugurated some twenty years ago by Drs. August and Theodor Schott, and has recently found its way into English literature. Dr. August Schott, now deceased, published his first paper in the *Berliner Klinische Wochenschrift*, in 1880. Dr. Theodor Schott published his first paper in the same journal in 1883. Since that time both the brothers Schott have published several monographs and journal articles on various phases of the subject, and in 1891, at the instance of Dr. Bezley Thorne, Dr. Theodor Schott communicated to the *Lancet* a brief account of his methods. Dr. Thorne published a monograph on the subject in 1895, and for the last two years, probably because of the great success that Dr. Thorne has been having in London, in the treatment of chronic diseases of the heart by the Nauheim methods, the *British Medical Journal* has been pretty well filled with papers upon this theme. Several eminent British physicians, among them Sir William Broadbent and Sir T. Grainger Stewart, have visited Bad Nauheim and recorded their observations, all very much in favor of the method and confirming the scientific character of the observations of the brothers Schott. In fact, a very noticeable feature of these reports is the praise accorded to these gentlemen for their

moderation in statement and their carefulness in observation; particularly when we consider the really wonderful nature of the recoveries that they report. The treatment carried out at Nauheim is directed toward the relief of the damaged heart, in cases of dilatation or ruptured compensation associated with valvular lesions, by action upon the peripheral vessels and blood spaces; partly through the effect of thermal, saline and carbonated baths, and partly by a special system of gentle muscular exercise, which, with the assistance of Dr. West, I shall partially demonstrate this evening. The baths are an important but not an essential portion of the treatment — that is to say, the exercises will do a great deal alone, as we have experienced in four cases. In some instances the baths alone are said to have been successful. At Nauheim, the baths are given in gradually increasing strength in the natural waters, which are of various temperatures and carbonated, containing likewise a number of alkaline and iron salts. Dr. Schott and Dr. Thorne both say, however, that the essentials of the baths can be artificially reproduced by the use of heat and the appropriate reagents, and give formulas for the purpose, chiefly calling for the use of sodium and calcium chlorides, and free carbon dioxide; the latter being released from reservoirs, or evolved in the bath by the use of sodium bicarbonate and hydrochloric acid. I hope soon to

have facilities for observation with these artificial baths, but up to this time I have nothing special to report concerning them, and therefore shall confine my remarks this evening to the exercises. I was under the impression — until I hunted up the literature — that my lecture and demonstration at the Philadelphia Hospital in November last, late as it was, had been the first American contribution to the subject, but I find that Dr. Robert H. Babcock of Chicago published a communication in the *Journal of the American Medical Association* for 1893, Dr. Babcock himself having been a patient of Dr. Schott's, and reporting his own case and some other cases on his return to America. One feels somewhat chagrined at his own tardiness when he reads this communication and the others referred to.

The method of exercise is called by Dr. Schott *Widerstandsgymnastik* — resistance-gymnastics. Perhaps the best way to English this term would be to call it *resistance-exercises*, but this alone would not convey the idea. "Swedish movements" are resistance-exercises, too; but this system is differently carried out. "Gently-resisted movements" would perhaps convey the idea better. The patient makes very slight efforts with various muscles, and these are resisted by the operator very gently. As the treatment progresses the resistance is increased, calling upon the patient to put forth great exertion. There is a course of exercises laid down by Dr. Schott, the whole occupying from thirty minutes to one hour, but the number and degree of movements are varied according to the patient's requirements. With my patients only twenty minutes' exercise has thus far been attempted.

Dr. Schott says that his system consists of slow movements made by the patient and resisted by the operator, short intervals being allowed for rest. The exertion should be small and the patient should be loosely clothed and told to breathe quietly. This matter of quiet breathing is quite important. It must be watched and controlled by the operator. The resistance should not be

of such a kind as to prevent the patient feeling master of the situation. The operator must not grasp or in any wise constrict the limb, but oppose by the hand held flatly. The following rules are laid down:

1. Each movement is to be performed slowly and evenly, that is, at a uniform rate.

2. No movement is to be repeated twice in succession in the same limb or group of muscles.

3. Each single or combined movement is to be followed by an interval of rest.

4. The movements are not allowed to accelerate the patient's breathing, and the operator must watch the face for the slightest indications of (a) dilatation of the alae nasi; (b) drawing of the corners of the mouth; (c) duskiness or pallor of the cheeks and lips; (d) yawning; (e) sweating; and (f) palpitation.

5. The appearance of any of the above signs should be the signal for immediately interrupting the movements in process of execution and for either supporting the limb which is being moved, or allowing it to subside into a state of rest.

6. The patient must be directed to breathe regularly and uninterruptedly and should he find any difficulty in doing so, or for some reason show a tendency to hold his breath, he must be instructed to continue counting in a whisper during the progress of each movement.

No limb or portion of the body of the patient is to be so constricted as to check the flow of blood.

The physiological effect and therapeutic object of these procedures are to accelerate the flow of blood through the vessels and diminish the work thrown upon the heart, allowing its chambers to contract more readily—hence the importance of attending strictly to the details mentioned.

The exercises consist in motions with the limbs, hands, feet and trunk, made against slight resistance. They are so devised as to call into operation, according to a definite order and succession, nearly every voluntary muscle and system of muscles in the body. While this

order has been carefully worked out by the brothers Schott as the result of long experience, the physician is to use his judgment as to which exercises are to be used and which omitted in any particular case. The system advised begins with the upper extremities, goes to the trunk, then to the lower extremities and concludes with a return to the upper extremities. The motions include extension, flexion and rotation or circumduction.

As already stated, the movements are carried out in a certain definite system, uniformly with intervals of rest after each movement and with gentle resistance upon the part of the operator, who carefully watches the effect so that the patient shall not be exhausted. The operator especially regulates the patient's breathing (which is not allowed to become accelerated) and the color of the face; hurried breathing, even distention of the nostrils, flushing, pallor, or sweating, being a signal for interruption or cessation. In suspending the treatment, the operator's judgment decides whether to support the part being exercised in the position it has assumed, or to allow it to return gently to a position of normal rest. So too, while it is best for the patient to stand, he may sit or lie when too feeble to begin treatment otherwise.

The following is the list of exercises :

1. Arms extended in front of body on a level with shoulder, hands meeting ; arms carried out until in line and brought back to original position.

2. Arms hanging at sides, palms forward ; arm flexed at elbow until tips of fingers touch shoulder, back to original position ; one arm only moved at a time.

3. Arms down, palms forward, arms carried outwards and upwards until thumbs meet overhead ; back to original position.

4. Hands in front of abdomen, fingers flexed so that second phalanges touch those of opposite hand ; arms raised until hands rest on top of head ; back to original position.

5. Arms down, palms against thighs, arms raised in parallel planes as high as possible ; back to original position.

6. Trunk flexed on hips ; return to original position.

7. Trunk rotated to left—to right ; return to original position.

8. Trunk flexed laterally.

9. As No. 1, but with fists clinched.

10. As No. 2, but fists clinched.

11. Arms down, palms against thighs, each in turn raised forwards and upwards until arm is alongside of ear, then turned outward ; arm descends backwards.

12. Arms down, palms to thighs, both together moved backwards in parallel planes as far as possible without bending the trunk forward.

13. Thighs in turn flexed on trunk, opposite hand resting on chair.

14. Lower extremities in turn extended fully and bent on trunk forwards and backwards to extreme limits of movements, opposite hand resting on chair.

15. Legs in turn flexed on thigh, both hands on chair.

16. Feet together, lower extremities in turn abducted so far as possible and brought back to original position, opposite hand on chair.

17. The arms extended horizontally outwards, are rotated from the shoulder joint to the extreme limits forwards and backwards.

18. The hands in turn are extended and flexed on the forearm to extreme limits and brought back in line with arm.

19. The feet in turn are flexed and extended to extreme limits and then brought back to their natural position.

The duration of the exercises is from twenty minutes to an hour and a half, an hour being the average at Nauheim even in the beginning. The following are the results stated to be obtained by the baths and exercises at Nauheim :

(1) Diminution in the frequency of the pulse, with increase in its force and fulness ; (2) Contraction of the heart, as shown by the diminution of the area of cardiac dulness and recession of the apex-beat upward and toward the median line. (3) Slower and deeper breathing with a sense of lightness and relief in the chest ; (4) A better color of

the lips and improved facial aspect; and (5) when that organ has been congested, a marked diminution in the size of the liver. Furthermore, after a few days of systematic administration of the exercises, there is usually observed marked and often long-maintained diuresis.

Dr. W. Bezley Thorne says: "The results, in fact, are such as would scarcely be believed by anyone but an eye-witness. It is by no means uncommon in cases of dilatation to see within one hour the oblique long diameter of the heart's area of dulness diminish by from three-quarters of an inch to an inch and a quarter and, perhaps, more surprising still, to observe a diminution of as many as two inches, in vertical measurement, of a liver which at first extended to the umbilical level; and to hear the patient, at the conclusion of what cannot be described as an ordeal, volunteer the statement that a load has been removed from the precordia, that he breathes easier and more deeply and experiences a sense of general relief. Such gains are not permanent and in the time that intervenes before the next day's exercises or baths, as the case may be, the dilated and congested organs tend to their former size, but do not wholly relapse. A slight proportion of the gain is held and succeeding increments until, as the result of treatment, perhaps at the end of a few weeks, the dilated heart and the congested liver have recovered their normal dimensions, or at any rate such contraction and compensatory power in the one case and resolution in the other, as to make them practically sound."

Sir T. Grainger Stewart concludes as the result of personal observation with the Nauheim treatment:

"1. That in a large proportion of cases it effects immediate improvement in the condition of the heart, as shown by percussion and auscultation; the sounds becoming more distinct and the area of dulness diminishing to a greater or less extent.

"2. That in many cases the rhythm of the pulse improves and the beat becomes more vigorous.

"3. That while the immediate effect

is in so far temporary, the heart rarely goes back to its previous condition of dilatation, but remains somewhat smaller than it had been before the exercises and that gradually improvement of a lasting kind sets in, so that the heart recovers its tone and the area of dulness permanently diminishes."

As to the effect in cases of valvular lesions, it is stated that in the course of the first few movements a bruit due to stenosis is observed to be accentuated, that afterwards diminishes, as the peripheral resistance lessens. In our case the accentuation of the bruit has remained, the sound at first having been but faintly heard, owing to the weakness of the cardiac muscle, and its greater audibility now being interpreted as a sign of increased muscular vigor. Indeed it is urged as a diagnostic merit of the method that valvular lesions previously unsuspected may become recognizable by the development of murmurs during treatment. Murmurs due to insufficiency other than that caused by actual lesion of the valves are diminished in intensity, modified to duplication and finally obliterated. In cases of early valvular lesions, the murmurs are said to disappear as the final result of treatment. The condition of the cardiac muscle is so much improved in the long-continued cases that I have had under observation that we may readily believe the statement that in early cases all traces of myocarditis are removed.

The counter-indications against the treatment in the entire range of chronic cardio-vascular affections are advanced arterio-sclerosis, decided degeneration of the cardiac muscle and aneurism. Some of the conditions earlier deemed counter-indications are not now so considered. Thus, in the patient before you this evening, a quite advanced case of arterio-sclerosis, the exercises have certainly done much good. The only absolute counter-indications that remain generally insisted on are marked atheroma, as with pipe-stem arteries, and advanced cases of aneurism in which clots might be loosened and emboli thrown out into the circulation. One should, however, be cautious until he has had sufficient ex-

perience to decide for himself. It might be very rash for me to apply the method in a case Dr. Schott might so treat with benefit.

Dr. Thorne states that he has witnessed improvement amounting to practical or actual cure in cases presenting the physical signs usually regarded as indicative of the following affections; stenosis of either the aortic or the mitral orifice, stenosis of both; insufficiency of either or both; with attendant dilatation; dilatation consequent on myocarditis, on habitual hemorrhage and on constitutional anemia; fatty heart (interstitial); weakened heart; congenital mitral insufficiency; patent foramen ovale; and angina pectoris of apparently both neurotic and organic causation. He adds that "it is reasonable to assume that measures, calculated to diminish peripheral resistance, and to promote the nutrition and repair of the cardiovascular tissues, must be applicable to at least the early stages of aneurism of the heart and great vessels."

The physiological mechanism by which this is accomplished is in brief that the gently-resisted movements, carried out as described and demonstrated dilate in turn the peripheral vessels in every section of the body, distend the lymph-spaces relieving the veins, thus employing for therapeutic purposes the pumping action of the muscles and securing increased filling of the arteries and better emptying of the heart. In other words, by increasing the volume of circulation in both arteries and veins, by better filling of the vascular system generally, including lymph-channels and lymph-spaces, and thus affording a much larger peripheral area for the blood, the left heart is better emptied by forcing the blood into the capillaries, the arterioles, the larger arteries, the aorta, and back pressure upon the left auricle being relieved, the right heart is relieved through the pulmonary circulation, and thus the veins are still further emptied, the congested liver often markedly diminishing in size. In effect the peripheral pump is substituted for the central pump of the circulation, and the latter being able to contract upon the

lessened quantity of blood, now becomes able to do its work once more, and all this without the use of any drug.

I have here some careful notes of the case before us which have been made by Dr. West. It will not be necessary to read them in full. The patient, a widow, fifty-eight years old, came under observation at the Philadelphia Polyclinic on the second of October, 1896; having had influenza, of three weeks' duration, a year before, followed by dry pleurisy. For the past five years she has been subject to attacks of dyspepsia and nervousness. A good deal of mental disturbance had recently made her more nervous. In addition to the dyspeptic symptoms, she sought relief for dyspnea, constant, and increased on exertion, headache, vertigo and continuous palpitation of the heart which gave rise to a sound heard in the left ear. There is also at times a sensation of "stoppage" of the heart. While in high altitudes (Colorado) she was subject to fainting spells. On examination the heart was found dilated and displaced to the left, the apex-beat being in the sixth interspace one inch to the left of the nipple. Both sounds were feeble, the second being relatively accentuated. There was a faint, harsh systolic murmur, heard best at the aortic cartilage and feebly transmitted into the neck. The pulse was small, feeble, its rate 96, with the patient standing, the artery somewhat hardened. There was occasional intermittence. Small quantities of albumen and granular and hyaline casts were found in the urine. There was no edema.

Under treatment the heart has receded until the apex, from being one inch to the left of the nipple, is now permanently half an inch to the right of the nipple; and from the sixth interspace it has receded into the fifth. The sounds are stronger, the first markedly so, and the movement is more distinct, though perhaps softened in quality. Intermittence has ceased. The artery is larger, the beat fuller and slower; the record of today being 68 with the patient seated. The sphygmographic tracings which I exhibit, and which

were taken before, immediately after and ten minutes after the exercises on a number of occasions, the pressure being but slightly raised, as recorded, and the instrument and the observer being the same in each instance, show the great improvement in the fulness of the arteries and in the character of the beat. For instance, at the beginning of treatment there was scarcely any elevation of the lever and the tracing is markedly that of rigid, unfilled arteries — the tidal wave being wanting. This may be contrasted with the recent tracing in which the pulse is beginning to resemble a normal pulse, the elevation being, however, less than normal, and the tidal wave still obscured; for, of course, we have not given the patient new arteries. The patient has lost her unpleasant symptoms, except that there is still a slight noise in the ear. In especial she has lost the extreme depression and dread of suffocation which was the most distressing feature of the case.

The albumen has disappeared from the urine and I find that similar cases are also recorded by Dr. Schott and Dr. Thorne. In another Polyclinic case, one of mitral regurgitation and interstitial nephritis, the albumen was markedly diminished but did not entirely disappear. However, the patient felt so much better, her edema having gone, and her dyspnea being relieved, that she declared she was well and went back to work. For this reason I was unable to bring her before you this evening. In conclusion let me say that this is but a preliminary communication to call your attention to the subject, in the effort to atone as much as possible for my long neglect of the method, by doing my share to make its merits more widely known.

From reading and limited observation, I believe the Nauheim system to be one of the greatest advances in the line of therapeutics without drugs that has yet been made; worthy to rank with Brand's cold-bath treatment of typhoid fever and the pneumatic treatment of pulmonary tuberculosis. It is more troublesome than the writing of pre-

scriptions, but, in suitable cases, much more effective.

Society Reports.

THE TRI-STATE MEDICAL ASSOCIATION

OF WESTERN MARYLAND, WESTERN PENNSYLVANIA AND WEST VIRGINIA.

SIXTH ANNUAL MEETING HELD AT CUMBERLAND, MD., DECEMBER 3, 1896.

THE Association met at 1.30 P. M., in the Y. M. C. A. Building, Cumberland, Maryland, Thursday, December 3. The meeting was called to order by Dr. E. T. Duke, the presiding officer. Rev. Lewis Randall offered prayer.

Mr. Isaac Hirsch, a member of the City Council, delivered the address of welcome, to which Dr. A. G. Smith of Ocean, Md., responded on behalf of the visiting physicians.

Next followed the regular order of routine business. Drs. J. F. Graham of Piedmont, West Virginia, and J. G. Abbott of Shaw, West Virginia, were elected to membership.

The following physicians were present: Dr. A. Enfield, C. P. Calhoun, S. H. Gump, Bedford, Pa.; Dr. S. G. Statler, Alum Bank, Pa.; Dr. C. S. Hoffman, Keyser, W. Va.; Drs. E. H. Parsons, J. F. Graham, Piedmont, W. Va.; Dr. Wm. F. Barclay, Pittsburgh, Pa.; Dr. A. C. Harrison, Meyersdale, Pa.; Dr. F. L. Baker, Burlington, W. Va.; Dr. J. Oliver Loutz, Aurora, W. Va.; Dr. C. Foutche, Westernport, Md.; Dr. R. Taylor, Slavesville, W. Va.; Dr. Robt. Gerstell, Elk Garden, W. Va.; Drs. W. J. Craigen, F. W. Fochtman, G. H. Carpenter, E. T. Duke, J. M. Spear, W. F. Twigg, Geo. Broadup, Richard Gerstell, C. H. Ohr, Cumberland, Md.; Dr. C. Brotemarkle, Lonaconing, Md.; Dr. S. A. Boucher, Barton, Md.

Dr. J. Lee McComas, who had been appointed a representative to the Pan-American Medical Congress, was unable to be present. Drs. T. A. Ashby of Baltimore, and A. F. Spicker of Elk Lick, who were to have read papers, were unable to attend the meeting. It was decided to have a report of the

meeting published in the MARYLAND MEDICAL JOURNAL. A committee was appointed to have transactions of the Association published.

The committee on memorial introduced resolutions of respect to the memory of Dr. S. S. Good, formerly president of the Association, who resided in Meyersdale, Pa.; Dr. Thos. C. Price of Frostburg, Md., and Dr. J. B. Murdock of Pittsburgh, Pa., all of whom had died within the past year.

Dr. Charles H. Ohr read a paper entitled LA GRIPPE, which was listened to with marked attention, not alone on account of the paper, but from interest in the writer. Dr. Ohr is in his eighty-seventh year, is hale and hearty, with all of his faculties remarkably well-preserved, and is still in practice.

Dr. Wm. F. Barclay agreed with Dr. Ohr that the disease was of germ origin. He regarded rest in bed, diaphoretics and laxative treatment as all that was needed in simple cases. Peculiar nervous conditions which sometimes follow it require special treatment, as tonics, sea air or change of residence.

Dr. A. G. Smith thought the cases attended with high temperature required active treatment.

Dr. Richard Gerstell thought la grippe a serious affection. He had found that aged persons were most apt to be affected with pneumonia as a complication, the middle-aged with nervous diseases, and children with intestinal and stomachic troubles.

Dr. C. S. Hoffman spoke of the occurrence of pneumonia with few outward manifestations and advised thorough examination of the lungs in all cases, especially the aged.

Dr. Ohr closed the discussion.

Dr. T. A. Harris of Parkersburg, W. Va., reported AN INTERESTING CASE. The case related was of considerable interest not alone from a medical, but a legal, standpoint as well, and discussion followed bearing on malpractice suits and remedies to prevent them.

Dr. Barclay advised that the members of the profession of medicine should stand together and protect one another,

instead of advising suits for malpractice against members of the profession, as is so often done.

Drs. Gerstell, Carpenter, Hoffman, Ohr and others all voiced the same sentiments.

Since this meeting Dr. Harris writes that the case was thrown out of court. To the friends of Dr. Harris, who are familiar with the merits of the case, the news is welcome that he has been relieved of the annoyance and expense of a trumped-up case and to the profession at large it is of interest, as the success of a suit of this kind would encourage others to bring like cases into court. An effort will be made at the next meeting of the West Virginia Legislature to have the law regarding evidence in cases of this kind amended so that a party to the suit can be heard in his own behalf, which seems not now to be the case.

Dr. S. A. Boucher read a paper on the TREATMENT OF INEBRIATES. This closed the afternoon session.

The Association again met at 8 P. M. with Dr. Duke in the chair. The first paper of the evening was by Dr. Barclay of Pittsburgh, entitled THE SCIENCE OF GENERATION AND ITS PHENOMENA. (See page 299.)

Dr. H. W. Hodgson reported an interesting case of MUMMIFICATION OF THE FETUS. Discussion followed, participated in by Drs. J. M. Spear, W. F. Twigg, R. Gerstell, A. Enfield.

It was decided that the next meeting would be held at Bedford Springs in July. The Association then adjourned.

OVARIAN ABSCESS AFTER DELIVERY.—Bröse (*British Medical Journal*) relates that a woman, after confinement, had high temperature, which subsided, but the severe pain which accompanied it continued till, at the end of three months, when he operated. Both appendages were removed. The right ovary was converted into an abscess larger than a walnut, the left contained a smaller amount of pus. The left tube was also suppurating. The temperature had been normal just before the operation. Recovery was rapid.

MARYLAND Medical Journal.

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MARYLAND MEDICAL JOURNAL,

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BALTIMORE, FEBRUARY 20, 1897.

WHEN one chooses the medical profession either as a means of livelihood, or for the purpose of scientific study, *The Physician in Literature.* he practically abjures all other pursuits and leaves behind him the hope of distinction in other callings. Modern medicine is so comprehensive and requires such an extensive knowledge, not only of the administration of drugs or the application of apparatus, but of various cognate sciences, such as chemistry, bacteriology, embryology, hygiene, etc., that one mind is too feeble to fully grasp the whole domain and one life too short to encompass it.

Medical men, therefore, usually limit their work to certain definite lines, either as specialists in some practical branch, or as experts in some less practical but equally important field of research. It occasionally happens, however, that some of our professional brethren, from one cause or another, are able to climb to greater heights than their less fortunate or less cultivated fellows and from these higher regions obtain a clear view of realms hidden from the sight of those who

toil on a lower plane. One of the most notable of this small group was the late genial Autocrat of the Breakfast Table, Dr. Oliver Wendell Holmes, physician, poet, philosopher, distinguished in every field to which he devoted his attention, yet had not a fortunate train of events given him leisure to pursue literature as a pastime, it is possible that we would never have had the rich legacy which he has left us.

Dr. John Brown of Edinburgh, whose charming yet pathetic story of Rab and His Friends has been read by thousands, perhaps by millions, on both sides of the Atlantic, is another who has risen above the general mass and was a physician and something more. At the present time, one of the most conspicuous instances of the ability of a physician to reach the highest pinnacle of professional eminence and at the same time to gather laurels in general literature is Dr. S. Weir Mitchell of Philadelphia, who is the author of several works of fiction. His latest production is now appearing as a serial in the *Century* magazine, beginning with the number for November, 1896. It is entitled "Hugh Wynne, Free Quaker," and treats of incidents coincident with the Revolutionary War and is of great interest not only as a pleasing story, but as a faithful picture of life in Philadelphia at that period.

There has recently come into our possession a volume of poems by Dr. Richard Henry Thomas, lately a specialist in diseases of the throat and nose in Baltimore City, but now an invalid striving to regain his strength in Italy. Dr. Thomas is not only well-known as a practitioner of his specialty, but as an earnest and eloquent minister of the Gospel of the Society of Friends. Three years ago he went abroad on a missionary visit, more especially to the Scandinavian countries, and as the result of overwork has been compelled to give up all active effort and to battle for his life. During his absence he published in London the little volume of poems already alluded to.

As might be supposed, the great majority of these are of a religious character and many of them have a tinge of sadness and suffering which is probably but a reflex of his own mental and physical distress. Whilst Dr. Thomas may perhaps never be enrolled in the ranks of the great poets, there is nevertheless much merit in his verses.

THERE are probably few diseases of children in which the physician is as likely to

*Pleurisy Under
Five Years.*

miss his diagnosis as in this. Pleurisy in the adult has an imposing array of physical signs and symptoms by which its presence may be determined. In the young child these are either absent, obscure or actually misleading.

In the first place no disease of the respiratory organs in the thorax may be suspected. The pain, which is sometimes insignificant, may be referred by the little sufferer to the head, leading, with other cerebral symptoms as screaming convulsions, etc., to a diagnosis of brain fever. The cough may be either too slight to attract notice, or so paroxysmal as to suggest whooping cough. Vomiting, colic or purging may be so severe as to draw attention away from the chest entirely. In subacute forms of pleurisy the respiration may be nearly normal. (The expiratory grunt or moan and working of the alae nasi are here worthy of attention as pointing to chest disease.) Fever may be so slight as to lead the observer to think he has a trifling ailment to deal with.

If attention is attracted to the chest the examination of its contents may give results so like those given by pneumonia that the best observers may falter in differential diagnosis. Distrusting ordinary physical signs he may have to base his diagnosis of pleurisy, on the severe pain, which points to pleurisy, on the absence of preëxisting or attendant bronchitis, which is always found in the variety of pneumonia most frequent in very young children (pure lobar or croupous pneumonia without bronchitis being then rare); on the displacement of the apex-beat of the heart, which does not occur in pneumonia; on the failure of such patches of percussion dullness and bronchial breathing as are present to change with the progress of weeks, as they would do in acute pneumonia; and finally, on the abstraction of fluid by a common hypodermic syringe, with large-bore needle, such as is furnished by instrument makers, when introduced at one or several of these points of dullness, under antisepsis, to the depth of not more than one inch.

So deceptive is the disease that the physician (as in a case quoted by Dr. Clemesha in an excellent article on this subject in the *Buffalo Medical and Surgical Journal* for December, 1896), may actually treat the

wrong side of the chest, thinking that the over-active respiration of the healthy side indicates disease, rather than the somewhat muffled respiration of the side in which the unsuspected pleurisy is situated.

In view of these facts it is well for the reader to be again put on his guard against the elusive pleurisy of children (of say five years and under) which may run its course with abundant exudation to death wholly unsuspected. It may be that a mental retrospect of past years will suggest cases which have always puzzled him but which might answer to this key.

The chest ought to be carefully and repeatedly examined for pleurisy in obstinate cases of supposed pneumonic consolidation which does not change its signs to moist rales after weeks of duration; in obscure wasting diseases; in every case of obscure brain or bowel disease; in all febrile diseases of early childhood where the temperature fails to fall after a reasonable time or, having fallen, shoots up again without known cause.

Crepitant rales, vesicular and bronchial breathing, tympanitic percussion, normal chest girth and tolerably natural thoracic movements are all compatible with pleuritic effusion in young children.

THE New York Legislature is now considering a bill to compel the makers of all proprietary and secret remedies to file an analysis of their products with the State Board of Health so that the Board may be able to distinguish between harmless and dangerous compounds.

It is not the intention to make these analyses public, but they are kept on record simply for the protection of the people and to be used in case of prosecution. This does not go as far as the German laws, which compel the analysis to be put on the outside of the bottle or box.

Such a law would kill the sale of patent medicines in this country and while it would be much better for the people to know what they are giving out good money for, still the proposed New York law is a compromise which ought to accomplish much good.

As long as the secrecy is maintained in the composition of these preparations so long will they prove attractive to the people, but with contents known their charm is lost.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 13, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		27
Phthisis Pulmonalis.....		27
Measles.....		
Whooping Cough.....	2	
Pseudo-membranous Croup and Diphtheria. }	22	5
Mumps.....	7	
Scarlet fever.....	23	
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	3	1

Some physicians of Baltimore have started an organization to fight dispensary abuse.

Bay View will have a trained female nurse in charge of the female insane and male nurses in the male department.

Dr. Wilfred M. McLeod of Poolsville, Montgomery County, Maryland, died last week, aged sixty years. He was graduated from Georgetown University Medical College in 1876.

Dr. Norval W. Littell died at his home in Baltimore last week, aged sixty-two. Dr. Littell was born in New Market, Virginia, and studied first at the University of Virginia but later went to Philadelphia, where he was graduated from the Jefferson Medical College in 1863.

Next Wednesday, February 24, will be College Day at the Woman's Medical College. The buildings will be open during the day and addresses will be made at night. Dr. John Ruhrah is the new lecturer on bacteriology. Dr. John R. Winslow has resigned on account of ill health.

Health Commissioner McShane is enforcing the laws by stopping the sale of milk from farms where cows are diseased. During 1896 the department inspector examined nearly 1200 cows, and notices were sent to proprietors of 172 stables to put the latter in condition in conformity with the law. The law regarding sweat shops has also been in

force some time, and notices to provide a certain amount of space for each worker in the shops have been served.

The Hospital for Crippled and Deformed Children having outgrown its present quarters at 6 West 20th Street, in Baltimore, will shortly move to its new building, 2000 North Charles Street, which has been purchased by the trustees. The Hospital has been established but fifteen months. The building contains two wards, twelve beds, a dispensary, two nurses' rooms, an operating room, a kitchen and a laundry. The needy poor are treated free. The institution is supported by voluntary contributions and finished its first year without debt. In 1896, 209 cases were treated at the hospital, 98 of which were cured and 89 were improved and are still under treatment. Ten were transferred to other institutions and 4 died. Besides a board of officers and lady managers it has the following staff: Surgeon in charge, Dr. R. Tunstall Taylor; Assistant Surgeon, Dr. N. E. B. Iglehart; Consulting Surgeons, Dr. L. McLane Tiffany, Dr. J. M. T. Finney; Consulting Physicians, Dr. William Osler, Dr. I. E. Atkinson, Dr. William F. Lockwood.

The report of the Johns Hopkins Hospital for 1896 shows that there were remaining in the hospital on February 1, 1896, 103 male and 112 female patients. During the year, 1761 males and 1626 females were admitted. There were discharged 1746 males and 1116 females as well, 3362 remaining in the institution on February 1, 1897. Of these, 2849 were white and 513 colored. In the medical department 1283 were admitted, against 1098 of last year, and in the surgical department 1207, against 1243 of last year. In the gynecological 871, as compared with 814. Number admitted to obstetrical department, 26. The number of days of hospital treatment have been 88,690, as compared with 86,289 in 1895, making the daily average 243. The largest number in one day was 295, and the smallest 190. The total number of visits to the dispensary were 62,718. Of these, 16,069 were for medical treatment, 11,104 general surgical, 7115 neurological, 4583 genito-urinary, 2983 children's diseases, 4167 gynecological, 594 obstetrical, 12 venereal, 5068 for treatment of diseases of the throat, 5174 skin, 4065 eye, 1252 ear, and 531 were admitted to the hospital.

Book Reviews.

ESSENTIALS OF PHYSICAL DIAGNOSIS OF THE THORAX. By Arthur M. Corwin, A. M., M. D., Demonstrator of Physical Diagnosis in Rush Medical College, etc. Second Edition, Revised and Enlarged. Philadelphia: W. B. Saunders, 925 Walnut Street. 1896. Price, \$1.25, net.

This is a sort of a syllabus made by the author for the use of his classes and afterwards expanded for general use. It is somewhat lexicon-like in its brevity, but answers the purpose for which it was written. The first edition is largely original and shows the author's manner of teaching, but in the second he has made use of larger works on the same subject. The book has evidently been needed from the rapid sale.

A PRACTICAL TREATISE ON MEDICAL DIAGNOSIS. For the Use of Students and Practitioners. By John H. Musser, M. D., Assistant Professor of Clinical Medicine, University of Pennsylvania, Philadelphia. New (2d) Edition, thoroughly revised. In one octavo volume of 925 pages, with 177 engravings and 11 full-page colored plates. Cloth, \$5.00; leather, \$6.00. Lea Brothers & Co., Publishers, Philadelphia and New York, 1896.

This comprehensive manual has been thoroughly revised, but in it there are no radical changes. It is a most painstaking work and while rather full for the undergraduate, it is certainly of great use to him, but especially is it helpful to the physician uncertain of his diagnosis. The plates and illustrations are abundant. There is no material increase in the size of this volume.

A TEXT-BOOK FOR TRAINING SCHOOLS FOR NURSES; including Physiology and Hygiene and the Principles and Practice of Nursing. By P. M. Wise, M. D., Medical Superintendent, St. Lawrence State Hospital; Editor of the State Hospital Bulletin, etc.; with an introduction by Dr. Edward Cowles, Physician-in-Chief and Superintendent of the McLean Hospital, Boston, Mass. In two volumes. Volume I and II. New York: G. P. Putnam's Sons. 1896.

In this work the author has endeavored to include all that the nurse could need in a graduated course of study. The subject is taken up systematically and no part is neglected. There is perhaps almost too much in these two volumes which might have with better advantage been condensed in one, but as side reading with the help of a teacher they cannot but be of material assistance.

Current Editorial Comment.

THE MEDICAL LIAR.

Archives of Pediatrics.

PLAGIARISM is a personal sin, and he who thus sins does but little harm to his fellows. But quite different is the medical liar. He sins not only against himself, but against his fellows. It makes little difference whether he lies with the direct and deliberate intention of deceiving, or from criminal negligence in ascertaining the truth. It either case he is a public nuisance and an enemy to the profession.

DISCONTENT.

Southern Medical Record.

THERE is an undoubted tendency at present, and probably has always been, toward unfaith in the existing order of things in medicine. Disbelief in the efficacy of drugs with some amounts almost to complete infidelity. Dr. Holmes voiced this sentiment to the fullest when he made the remark that if all physic were thrown into the sea, it would be better for men and worse for the fishes.

PROFESSIONAL TACT.

Medical Record.

WHEN so much is said concerning the requisites for success in practice, one of the main means to the end—that of using tact with the patient—is too frequently left out of consideration. The possession of this in the highest degree is an evidence of genius, although the talent can be very successfully cultivated to the great benefit of both parties concerned. It is so important an element of success that it often takes precedence of sound learning, ripe judgment, and otherwise large attainments. The impression made upon the patient is the main thing, upon which must rest the ultimate chances of a good and paying practice. The doctor, to be a good business man, must practice his profession in a business-like way. He too often forgets that the patient is naturally a very selfish person, and that he takes no more interest in the physician than that which centers on the possibility of being relieved from pain and in being ultimately cured. The doctor is expected to meet him on that basis of understanding and nothing more and should not talk too much about himself and his own affairs.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Entaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY, 847 N. Entaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Entaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRISTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Entaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. W. S. GARDNER, M. D., President. CHAS. F. BLAKE, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Entaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. M. H. ANDERSON, 1st Vice-President. MRS. MARY F. CASE, Secretary.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY. Meets 1st Monday in each month. N. P. BARNES, M. D., President. W. F. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

MODIFICATION OF COW'S MILK FOR ARTIFICIALLY FED INFANTS.—In order to prevent the firm clotting to which cow's milk is prone, some alkaline solution may be added, or some prefer to use a small quantity of a mucilaginous or other thickening substance, such as barley water, a solution of gelatin, or one of the prepared foods, which act mechanically in obviating the formation of firm clots. Mellin's Food may be used; in this the starch has been converted into dextrin and maltose.—From "Food in Health and Disease," I. Burney Yeo, M. D., F. R. C. P.

THE RESINOL CHEMICAL Co. Gentlemen:—The sample of Resinol sent me cured a chronic case of scrotal eczema, which has resisted all previous treatment for years. I am now prescribing it with unvarying good results in various cutaneous affections, and am satisfied that in the Ungt. Resinol we have the best local application for a wide range of annoying skin diseases that has ever been offered the profession.—Very respectfully, C. G. SLAGLE, M. D., Professor of Pediatrics, College of Physicians and Surgeons, Medical Department Hamlin University, Minneapolis, Minn., October 31, 1896.

AN AGREEABLE HYPNOTIC.—In many nervous affections attended with insomnia the physicians' efforts to secure beneficial sleep are frustrated by the abhorrence exhibited by the patients towards the majority of hypnotics. It is, therefore, extremely important in these cases to select a drug which will be palatable and which if necessary can be administered without the knowledge of the patient. In reviewing the list of hypnotics in common use we find that but few of them are possessed of this quality. In view of its freedom from taste and odor, Sulfonal has been found particularly useful in cases where the patient manifested a repugnance toward hypnotics. It can be readily administered in warm milk or other fluids, and never excites gastric or intestinal disturbance. The sleep produced is free from narcosis, being deep and refreshing, and if the drug had been properly administered in abundance of warm fluid there are practically no after-effects. Sulfonal is so safe a remedy that it has been extensively used in pediatric practice with advantage because of its palatability.

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Original Articles.

THE VALUE OF STATISTICS.

By John S. Fulton, M. D.,

Secretary of the State Board of Health of Maryland.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

THE pursuit of scientific truth is by one means and one method. Observation is the only means, and repetition the only method. Without repeated observation is not anything known that is known. No single observation determines any truth. The first product of observation is suggestion, or conjecture; repetition transmutes the crude material first into opinion, then to conviction, and at last, perhaps, to demonstration. Early in the series one may doubt the observation, at the end of the series one doubts not the observation, but the observer.

The scientific method is, therefore, essentially statistical. Indeed, statistics of one sort or another are the only ground upon which any of the business of this world has ever been successfully conducted. Each of us manages his own affairs by light of his own and others' experience, that is, by the statistical method; or else he mismanages.

Those who say what we so often hear, that statistics are misleading, mistake the passive for the active, like the belated and elated citizen who at midnight damns the keyhole for an artful dodger. Delusion is wrought, not by figures that lie, but by liars that figure.

To make a contention for the application of the statistical method to the

latest, largest, and most important section of the field of practical medicine, is to engage in a work which ought to be wholly unnecessary.

Statistics opened the door to preventive medicine. In most civilized countries vital statistics have long been collected, not for any medical use, but for their great business value; and their regular, systematic record and classification not only first demonstrated the need of organized effort, but have also been of constant service in the device of means to prevent disease and death.

In England vital statistics have been collected and published since 1838, while the first report of the Medical Officer of the Privy Council appeared twenty years later. The vital statistics of Massachusetts have been collected since 1842, but the Board of Health was not created till 1869. The vital statistics of Michigan antedate the organization of the Board of Health by five years.

The commonwealth of Maryland instituted her public health organization upon indications furnished by the statistics of other communities, and yet lacks figures of her own which can justify the existence of a Board of Health. Apparently Maryland is content to be told once in ten years that her capital stock in human life has increased. She

never conducts such an inquiry for herself, nor ever asks if human life has anywhere been wasted. She collects information about the frequency, extent, localities, causes of, and defenses against fire, and a hundred or more fire insurance companies adjust their rates accordingly. The life companies do a vastly greater business, based upon statistics which do not contain a single line of Maryland figures.

There are reports upon oyster, terrapin and game, the cattle on her hills are numbered, there are treasured archives in her herd books, and the Live Stock Sanitary Board meets thrice weekly. The State Board of Health has monthly meetings, but makes no record when a Maryland mother does her duty. A practice of State Medicine which wants those things which can best direct its measures and attest its results has little kinship with the science of today. It is more closely related to the art of a century ago, so brutally characterized by Sir Astley Cooper, whom one will not quote for fear of falling into condemnation.

If it is sought to move legislation to supply such data, it must, I fear, be shown that some good will accrue to the commonwealth, other than a practical knowledge of the forces arrayed against public health. The preaching in season and out of season of hygiene is utterly futile, so long as the commonwealth is under no conviction of sin. Citizens, councils and corporations will only hear the voice of the tempest or the earthquake.

Four cases of rabies send a shudder to every fireside, and set aroar all the presses of the State; but in ten lines weekly from the City Health Department there are suppressed more and worse " 'orrible and disgustin' details." If all days were dog days, rabies would not cut so wide a swath of desolation as marks the 'unobstructed path of measles or of whooping cough.

In 1890, measles slew 248 innocents in Baltimore, and this city has for twenty years paid tribute of about two lives a week to whooping cough.

The ever active Health Department

was recently besieged with inquiry. Nearly a million people wanted to know why the water smelled badly. Did any one ask Dr. McShane whether water-borne diseases were costing us more than the usual two lives a day?

A town nourishing and cherishing 70,000 culture vats for intestinal bacteria sets up a hundred gates at railway crossings, as if by some subtle algebra, the value of life might be computed from the manner of death.

Does the medical profession of this State of Maryland appreciate the value of vital statistics? I fear not. If they did, no legislature could withstand their clamor for a law on the subject. Statistical tables are rather seldom studied by the rank and file of the craft. Ignorance of the use of this weapon must be somewhat prevalent everywhere, or we should not so often see bad theories obtain a temporary success by the aid of figures. We are learning today from the laboratories many things that might have long since been demonstrated by mortality tables. The unity of croup and diphtheria was practically shown by vital statistics years ago. In an assembly acquainted with the statistics of rabies, any person who would maintain that there is no specific disease entitled to that name would enjoy the same unenviable distinction accorded to the Rev. John Jasper, who thinks that the "Sun do move."

If this convention shall accomplish no other work, it will have served the State well if it shall unite the profession to believe and to propagate the truth that the people of Maryland have absolute need of a yearly balance sheet of life and death.

What data must vital statistics provide? From the business point of view the commonwealth has equal need to know her birth rate and death rate. From the medical standpoint, a knowledge of the places, causes and number of deaths is of first importance. Obviously the prime requisite for preventing deaths is a knowledge of the cause of death. The number of deaths assigned to each cause and each locality gives

us the needful acquaintance with the strength and position of our enemies. To know these things is the first and constant need of the sanitarian. They may not be learned once for all, must be relearned from week to week, and from year to year.

Various methods of collecting returns of death have been tried with less or more success, and it has been found that accurate results cannot be secured except by systematic registration of the facts at the time and place of their occurrence. Returns made weekly lose much of their value, monthly returns are worse, and yearly returns have little or no value. It is also clear that the facts must be recorded by an expert observer. The returns of undertakers and ministers are, and always must be, incomplete.

The only sure method of obtaining such records as may be profitably compiled and classified is based upon legislation which forbids the burial of a human body, except upon issue, from a central office, of a permit based upon a complete and accurate registration of the facts connected with the death. Such a record will embrace the name, age, race, sex, social condition, occupation, birth-place, residence, cause of death, duration of illness, with all other information which has practical interest and can properly be conveyed by the attending physician, or next of kin. The most available source of expert information is the attending physician.

Now the physician has no personal interest in the execution of such a law, and sometimes he objects to the imposition of such a tax upon his time without the offer of any compensation. I do not think that this objection is a very common nor do I consider it a very reasonable one. His is a protected industry, and the physician receives, even in this State, certain privileges and immunities which fairly compensate him for the trouble involved in the preparation of a death record. The law can, of course, not compel a physician to testify to matters of which he has no personal knowledge, such as the age and birth-place of a decedent, but un-

der her police power, to protect life and prevent fraud, the State may exact of a physician testimony as to the cause of death.

In certain exceptional instances the responsibility of the physician may be very great, since he is the first judge of the evidence as to whether or not the death was due to crime or negligence, or whether further inquiry is necessary. He may not be required to testify beyond what he knows, but it should be easy for him to indicate in his report what matters are of personal knowledge, and what are the results of inquiry.

It is in all cases wise, and perhaps generally necessary, to verify the death. Fraudulent reports of death are often the basis of swindling schemes.

In France, Austria and Belgium reported deaths are always subjected to verification by a physician employed and paid by the State. In England, and in our own country, the signed testimony of the attending physician secures the issue of a burial permit.

A very appreciable benefit to well qualified practitioners indirectly follows the practice of registration of deaths. The first thing which a registrar will have to inquire is, whose certificates shall be accepted. This question will not be settled in a week, nor in a year. The character of the documents presented will more and more emphasize the necessity for discrimination as to who shall and who shall not be admitted competent to testify as to the fact or cause of death. If the State can of right demand any special qualification of medical men, it must exact that they shall be fit to certify as to the cause of deaths occurring under their observation. Thus the death certificate lays the foundation for effective legislation upon medical education, and draws a very clear line between the fit and the unfit to practice medicine.

To meet the physician's want of knowledge of past history of a decedent, the death certificate should be in two parts. The first part devoted to name, age, race, sex, social condition, occupation, residence, parents' names, and place of death should be filled and signed

by the householder or next of kin. The second part should be the certificate of the attending physician, who should state that he attended the deceased from ——— to ———, last saw him alive on ———, and that he died on ——— date at ——— time, cause of death, duration, of disease and complications.

The certificate thus prepared upon competent evidence, and presented at a central office, a burial permit should be issued to a legally authorized undertaker or sexton, who should be obliged to return to the central office the fact place, date and manner of burial. These regulations should have flexibility to meet certain exceptional contingencies, such as coroners' and other judicial inquiries, and deaths from contagious disease, where speedy burial is desirable.

Under such a system no penalty need be provided for failure on the part of the physician to report a death. The penalty would fall upon any person who should bury or attempt to bury a human body without a permit. A penalty should however be provided for fraudulent report, as for instance, the concealment of an infectious disease under a certificate of death from heart disease or paralysis.

This method would, if put into practice in our State, secure the registration of all the essential facts concerning ninety-five per cent. of the deaths which occur. The data so obtained, properly classified and compared, would be a useful implement in the hands of the State Board of Health.

The relation of the physician to the registration of births is not that of an expert witness. Such statistics are not of medical use and the medical man has no other interest in them than that of the average citizen. He should not be compelled to collect and return them unless he is paid for it, but having particular knowledge of the practical value of such statistics, he, more than any other citizen, should insist that they shall be exhaustively collected and exactly kept. They are of steadily increasing value both for private and public use, and [their importance is most

appreciated where they have been longest preserved. I suspect more pension claims are delayed and obstructed for lack of record of the marriage of parents and births of children, than by any other cause whatever.

We have statutory provision as to the "age of consent," as to responsibility for crime or misdemeanor, as to voting, as to education, as to child labor, as to descent, as to the guardian and administration, as to disabilities of minors, as to jury duty and military service, as to marriage, admission to certain professions, as to public office, etc. To meet the difficulties growing out of the absence of records, the courts admit the best "obtainable evidence." Securing the best "obtainable evidence" costs almost as much money every year as would pay the expenses of a vital statistics bureau.

The vital statistics of Chicago are confessedly very incomplete, not more than sixty per cent. of births being reported. The Registrar of Vital Statistics of Cook County furnishes a thousand copies a year of certificates of birth, which are accepted as final and conclusive evidence. The same official can also furnish a multitude of instances in which application has been made for copies of non-existent records, in default of which claims failed of adjustment, or remain yet unsettled, or were at last adjudicated after great expenditure of time, money and labor.

Most experts think it is impossible to collect statistics of sickness, believing that the compulsory notification of infectious diseases is as far as the law can carry us in that direction. To obtain the registration of infectious diseases four plans are used: First, immediate notification of the health officer by the doctor; Second, notification by the householder, or next of kin; Third, doctor to notify householder, householder to notify authorities; Fourth, both doctor and householder to notify.

The British Parliament in 1889 passed an infectious disease notification bill which contained the following provisions: "The head of the family to which

such inmate belongs; and in his default the nearest relative present in the building, or being in attendance on the patient; and in default of such relations, every person in charge of or in attendance on the patient; and in default of any such person, the occupier of the building, shall as soon as he becomes aware that the patient is suffering from an infectious disease to which the act applies, send notice thereof to the medical officer of health of the district. Every medical practitioner attending on or called on to visit the patient shall forthwith, on becoming aware that the patient is suffering from an infectious disease to which act applies, send to the medical officer of health for the district a certificate, stating the name of the patient, the situation of the building, the name of the head of the family or other person who appears to him primarily liable to formally give the notice under this act to the medical officer, and the infectious disease from which in the opinion of such medical practitioner the patient is suffering. Every person who fails to give notice or certificate as required by this section shall be liable on summary conviction in a manner provided by the summary jurisdiction acts to a fine not exceeding forty shillings (\$10). The local authority shall gratuitously supply forms of certificate to any medical practitioner residing or practicing in their district who applies for the same, and shall pay to every medical practitioner for each certificate, duly sent to him, in accordance with this act, a fee of 2s. 6d. (62 cents) if the case occurs in his private practice, and of one shilling (25 cents) if the case occurs in his practice as medical officer of any public body or institution.

In Rome, physicians are supplied with a little book of coupons of which two are detached whenever a case of infectious disease is discovered. One is delivered to the "syndic" and the other to the health officer. It is thought that these two officers act as a check upon each other. The law is very effective in its operation.

Physicians in this country have a reasonable opposition to a law which

inflicts a penalty upon them for failure to do that which if done will invoke the hostility of their patrons, and cannot be expected to actively controvert the narrow views of those who regard the notification of infectious disease as a violation of professional confidence.

The responsibility should go directly with the interests involved. The interest of physician and householder alike requires that early diagnosis should be made and expressed in such cases. It is one of the professional obligations of the physician that he shall notify the householder. He should, for the protection of the householder, be obliged, under penalty, to do so in writing. The householder should acknowledge the notification in writing and should, for the physician's protection, release him from responsibility for the results to the family of the presence of infection.

It is directly against his own interest for the physician to assume the responsibility of either isolation or disinfection, and it is a grave default of ordinary skill and care if he fails to advise both isolation and disinfection. He dare not testify that a case which he sees once or twice a day is isolated and he cannot afford to disinfect even if he be perchance competent to do so. In all towns and villages where a health organization exists, it should be unlawful for the practicing physician to disinfect a house. Such a prohibitory law would conserve the interests of both the profession and the public. It is enough that the doctor shall engage not to convey infection into or out of the sick-room and his patrons should not be permitted to lightly regard these extraordinary responsibilities.

The interest of the householder in the notification of the authorities is direct and immediate, since he needs what the doctor probably cannot give him if he would and probably would not if he could. Having both a private and a public interest in the notification of the health authorities, the householder should bear the penalty of failure to notify.

The popular prejudice against compulsory notification survives because

such ordinances are not enforced with respect to the minor infectious disorders. If householders were obliged to report mumps, whooping cough and measles, their experience with the milder affections would teach them that the law is both benevolent in intention and beneficent in action, so that in graver emergencies the intervention of the law would be, not suffered, but invoked.

In Rome the services of the public disinfectors are asked and obtained at short intervals during the progress of such a disease as tuberculosis.

The statutory provisions as to the time of reporting infectious disease should be stringently enforced. The report must follow the diagnosis immediately. In practice it is found that the report too often waits on the prognosis, and anticipates the death permit by such a breathless interval that one suspects there has not been a fair race between the shadow and the event. The weak point in most laws is the phrase "dangerous to public health," which is meant to include, within the meaning of the act, diseases not mentioned by name. In practice this descriptive phrase adds a third proposition essential to a conviction. It is possible to name all the diseases to which such an act should apply and conviction should follow proof of two propositions: First, that a disease named in the act existed at the time and place; and second, that it was not reported.

If it be true that complete statistics of non-infectious diseases are impossible of collection by law, I do not believe that the sanitarian is therefore obliged to pursue his work without the aid of such statistics. The scope of a statistical inquiry into disease is not defined by the nature of law, but by the community of interest among scientific men, and the degree of success or failure to collect such data is the precise measure of the scientific spirit. Experience shows that abundant data can be gathered upon any subject in which a number of people have a common interest. The now almost forgotten project of Louis by which a science of therapeutics was to have been built upon the col-

lective study of symptoms failed, because the means were not related to the end, and in its failure demonstrated that the persistent interest of many men could be held by a common motive.

The late Benjamin Ward Richardson inaugurated a plan for the collection of sickness statistics, but in a short time the expense of preserving the observations became too burdensome for the body of contributors. The accumulated records, of great value, were offered to the government but were declined.

One general rule applies to all undertakings engaging the services of many men. The relations that are not mutually helpful are either hurtful or sterile. So that in order to collect statistics of sickness it is only necessary to convince a sufficient number of competent physicians that some adequate return will be made for contributions to such statistics. The best of our craft will not contend for fees in such work, but will be satisfied to know that the recorded and classified data will be of current use, or that the central office, which receives them, will return some sort of service.

The argument that a systematic record of all sickness would be too expensive is perhaps a good one. But perfectly reliable statistics of disease do not require reports of all sickness. If the returns of a competent corps of observers, say one hundred, well distributed over a given territory, reporting weekly, give results which are quite consistent from week to week, from month to month, and year after year, such statistics must be accepted under the law of probabilities as sound data. In Michigan, such a system of weekly reports has been practiced for twenty years and the records are of a surpassing value. One hundred observers sending weekly reports of the sickness occurring under their observation would put an instrument of precision into the hands of a central officer who should know how to handle those reports.

It is not only theoretically, but practically, true that a hundred representative physicians in active practice will each see whatever disease is pres-

ent in each locality and will certainly see, year in and year out, a fixed proportion of all the disease in the State.

That such reports can and do display in the aggregate the consistency and delicacy of instruments of precision is well illustrated by the chart which shows a wonderfully close relation between the average atmospheric temperature and the monthly reports of sickness from pneumonia in Michigan. These relations are so close that formulæ may be derived from them which will enable one to compute within a very narrow margin of error the monthly pneumonia rate from the known average temperature.

It will thus be seen that in dealing with so large a subject as prevailing sickness it is no more necessary to have all the data of all observers, than one requires the readings of all the thermometers in Baltimore in order to determine the atmospheric temperature.

It is difficult for any man who is sensible of his own fallibility to realize that his observations with those of a number of equally fallible men will yield results of unvarying accuracy, but it is so. The combined records of a hundred sensible, honest men is a mine of many times the wisdom of any one wise man. It is out of the combination and not out of the addition or multiplication of observations that true results are accomplished and made evident. Truth is consistent and coherent, error inconsistent and incoherent. Hence as the mass of data grows the separation between truth and error grows ever clearer.

Records which are erroneous may still be useful, since few observations are false in toto, and even should the concrete error of a false classification be made, its falsity will one day appear and will be found capable of correction without disintegrating, perhaps without even dividing, the mass. Does any one wish that the statistics of croup had never been preserved, because they should have been charged to diphtheria, or that the statistics of typho-malarial fever were better lost than kept in the wrong pigeon-hole?

I hope in the course of the meeting to

show you illustrations of the easy recognition of false statistics and of the characteristic features of true tables, and that errors so neutralize each other as to have but little appreciable effect upon the total results of all statistics.

In conclusion, then, we have to say :

1. That compulsory notification of births, deaths and infectious diseases is a proper and important concern of the State and the worth of such records far outweighs the cost of obtaining them. Statistics of birth and death must be complete, because the State demands mathematical results.

2. That the collection of sickness statistics does not require and may be better effected without legislation. Their use being that of a sample for analysis, their value does not depend upon numerical completeness, but upon the fidelity of the observers. Such inquiry is a proper work of physicians and of the best physicians.

To the first proposition I have offered no proof that is new to, or needed by, any of you. Upon that we are agreed. To the second I invite your most serious consideration. If from this convention an impulse shall go forth which shall at length give Maryland an effective vital statistics law, it is well ; but if this assembly shall all realize the true worth of the daily observations of the feeblest man here and should exercise its ability to furnish a weekly list of the bare names of diseases present under each man's eye, such a work would give length of years to that which is now ephemeral.

Says Emerson : "The differences between men in natural endowment are insignificant in comparison with their common wealth. Do you think the porter and the cook have no anecdotes, no experiences, no wonders for you ? Everybody knows as much as the servant."

Let us besiege the shrine. The oracle will come and we shall discover how rich we are. To each man is the swift chance, but never too swift for all of us ; to each experience is delusive, but all may see the serried facts ; to each is judgment difficult, but that which all affirm is so.

A CASE OF ENCYSTED DROPSY OF THE PERITONEUM.
SECONDARY TO UTERO-TUBAL TUBERCULOSIS AND PYO-
COCCAL INFECTION, ASSOCIATED WITH TUBERCULAR
PLEURISY, GENERALIZED TUBERCULOSIS AND
PYO-COCCAL INFECTION.

By B. Bernard Browne, M. D.,

Professor of Gynecology, Woman's Medical College, Baltimore.

READ BEFORE THE CLINICAL SOCIETY OF MARYLAND, JANUARY 15, 1897.

ENCYSTED dropsy of the peritoneum is an extremely rare pathological condition, which formerly was considered to occur more frequently in men than in women, but the progress of abdominal surgery during the past few years has contributed to our knowledge as to the origin of this condition and established the opinion that in all or nearly all cases it is due to tubercular peritonitis, which is much more frequent in females than was formerly supposed.

The fluid lies above or rather in front of the intestines, which are bound down by adhesions; it sometimes extends over the whole anterior aspect of the abdomen; sometimes being divided into several divisions or compartments, while in other cases it is confined by narrow limits. Depressions are sometimes felt on the surface corresponding to the dissepiments; this condition has been noticed by Peaslee. Fluctuation is weak and limited and does not change its relations on changing the position of the patient.

It does not, as a rule, interfere with respiration and digestion, like an ovarian cyst, nor is it attended by edema of the lower extremities, or enlargement of the abdominal veins.

These collections were described by Nuck as early as 1758 and were attributed by him to an effusion in the space between the peritoneal fold, which was supposed to be double. The researches of Bernutz in 1856 tend to include encysted dropsy of the peritoneum among cases of tubercular peritonitis encysted by adhesions. Bernutz compared all the cases of encysted dropsy of the peritoneum analyzed by Morgagni, as well as all those reported up to the date of

his investigations, as examples of this form.

Bernutz, in 1856, in speaking of tubercular pelvic peritonitis, says: "It is somewhat surprising that this disease, which is far more common than is generally supposed, is not described in any of the modern treatises on gynecology. Tubercles may be deposited in any internal genital organ; sometimes only the ovaries are affected, in some cases the Fallopian tubes alone are diseased, as in the cases related, and, though the contrary opinion is generally entertained, I believe that the oviducts are more frequently affected than the ovaries themselves; and that whenever the uterus is tubercular, the oviducts are sure to be so."

In 1885, Dr. Wm. T. Howard of Baltimore gave as his address as President of the American Gynecological Society a paper entitled "Two Rare Cases in Abdominal Surgery." In this paper he treated the subject of encysted dropsy of the peritoneum in a very thorough manner and referred to several most interesting cases, among them that of Gardner of Montreal. (*Canada Medical and Surgical Journal*, June, 1885.) This case is also reported in full in the more recent paper of Dr. Osler in the Johns Hopkins Hospital Reports, 1890.

Dr. Howard went very fully into the differential diagnosis of encysted dropsy of the peritoneum from other forms of abdominal tumors.

His second case, at which he kindly invited me to be present, was in July, 1883; the patient was Francis R., aged 24. She seemed to belong to the white race, from her fair, white skin, long, straight auburn hair and somewhat ruddy cheeks. But it was subsequently

ascertained from the visits of her associates that she claimed to be of the colored race. The similarity in appearance led me to believe that this was encysted dropsy of the peritoneum. When he cut down to the peritoneum, he found it very much thickened; he introduced the trocar and drew off about 40 pints of slightly viscid greenish fluid; when this was removed one could look into an immense unilocular cyst, which seemed to occupy the entire abdominal cavity and to be tightly stretched over the spinal column and even the pelvic brim, down nearly to the ileo-pectineal line. It appeared as if all the intra-abdominal organs had been removed, excepting that there were no signs of where they had been attached.

In the paper above referred to, Dr. Osler has classified the tumor formations in tubercular peritonitis in four groups:

1. Omental tumor.
2. Sacculated exudations.
3. Retracted and thickened intestinal coils.
4. Mesenteric glands.

The cases under consideration in this paper are those of the second group.

The following case is reported in "Meigs' Diseases of Women:"

"A few years ago I opened the body of an elderly woman who died with an immense collection of water in her abdomen. The fluid amounted to many gallons, and, after it had been removed, I continued the incision from the sternum to the pubis; and when I had finished the incision and looked into the cavity I was for some time very much astonished to behold only a smooth muco-serous surface in the cavity and looked for some time in vain to find any liver, or stomach, or alimentary canal.

"It seemed as if I was examining an abdomen from which all the viscera had been carefully removed. I was greatly astonished and quite at a loss what to think of the case, or imagine what had become of the abdominal viscera, since the line of the spinal column was strongly drawn at the back of the great cavity I was inspecting and I seemed to look quite up into the empty concave of the diaphragm."

DIFFERENTIAL DIAGNOSIS OF ENCYSTED DROPSY AND OVARIAN CYST.

ENCYSTED DROPSY.

Is extremely rare. Slow increase. Preceded by an attack of peritonitis. Features natural. Health not bad. No dyspnea unless pleurisy exists. Digestion good. Abdomen not prominent at points, even depressed.

Abdominal veins not enlarged nor lower extremities edematous.

Fluctuation not strong, limited in extent, fluid being in front of the intestines.

Pleurisy frequent.

Per vaginam.

Uterus in normal place, sometimes fixed by adhesions, a mass or tumor felt on one or the other side of the uterus.

Sputum sometimes contains tubercle bacilli.

Temperature, 101° to 103° P. M. Frequently subnormal in morning.

Age, 24 to 30.

Race, mulatto or colored.

OVARIAN CYST. THIRD STAGE.

Common, and grows rapidly. Preceded by good health.

Features peculiar.

Health impaired.

Dyspnea. Digestion poor.

Everywhere prominent.

Abdominal veins enlarged. Extremities frequently edematous.

Fluctuation decided. Intestines on sides of the cyst.

Pleurisy seldom.

Per vaginam.

Uterus generally behind the tumor, which is in the median line, and fluctuation can be detected.

Sputum negative.

About normal.

All ages.

Generally in the white.

The case which I wish to report is the following:

Narcissa Allen, a whitish mulatto woman aged 30, entered the Good Samaritan Hospital, November 7, 1895. She was married and had one child about one year previously. She had commenced to menstruate at 15, had very much pain, and the flow had always been very free and lasted from six to eight days.

Her general health had always been fairly good. She had measles about the time she was grown, and an attack of malarial fever five years ago, lasting about three months. She had never been conscious of having any tumor or swelling until the fifth month of her pregnancy, when she noticed a hard lump on the left side which caused her intense pains at the time; she thought it disappeared, but a short time before her confinement she noticed a similar swelling on the right side but lower down in the abdomen; this swelling continued in the same position until she entered the hospital.

After the birth of her child she did not menstruate, but for months after-

wards she thought she was pregnant; the abdomen enlarged and the tumor on the right side increased in size until August, from which time until November 7; when she entered the hospital her condition remained about the same except she became weaker and emaciated.

On November 10, she was examined under an anesthetic and a hard, irregular tumor about four inches long and three in diameter was found on the right side and appeared to be connected with the uterus by a broad attachment. The woman seemed so weak and emaciated that it was deemed advisable not to attempt the removal of the tumor until her condition improved.

On the 13th, her abdomen commenced to swell and a general peritonitis set in; her temperature varied from 100° to 103° in the evening and frequently became subnormal in the morning. She had a cough and expectorated a great deal. As there was every reason to believe her condition was tubercular her sputum was examined on several occasions, but with negative results.

She grew weaker and suffered so much from the abdominal distention that on February 27 an incision was made in the abdomen and the fluid removed. Upon cutting down to the peritoneum it was found to be very much thickened and when cut through

about three gallons of a thin, greenish fluid escaped.

The empty sac extended from the diaphragm above almost to the symphysis, the intestines and other abdominal organs were completely shut off by the exudate, and none of them came into view.

On the right side where the tumor was situated was another partially shut off sac which contained about a pint of semi-solid, cheesy substance, which was removed.

The report by Dr. Claribel Cone of the microscopic examination of this fluid showed numerous pus cells, some red blood corpuscles and shreds of necrotic tissue entangling pus cells. Stained coverslip preparations exhibited numerous cocci in pairs, clusters and short chains; but no tubercle bacilli were found.

After the removal of the fluid the patient was very much more comfortable and improved for about a week, when she died very suddenly.

The post-mortem examination was made by Dr. Cone, Professor of Pathology in the Woman's Medical College, and Pathologist to the Good Samaritan Hospital.

(Extracts from the Report of Dr. Cone will be published in a future number of the JOURNAL.)

THE DANGERS OF ARTIFICIAL TEETH.

An inquest reported in the *Lancet* was held at St. Bartholomew's Hospital with reference to the death of a patient from hemorrhage caused by an artificial denture which had been swallowed some eight or nine months previously during a fainting fit. The patient was at the time seen by a medical man who, being unable to remove the denture by the mouth, forced it down towards the stomach, presumably with the hope that it would be passed per rectum. Death from swallowing artificial teeth is more common than is generally supposed, and many cases are to be found recorded in the various journals devoted to dental

practice. Artificial teeth properly fitted and secured are in themselves quite free from danger, and it is only when people persist in wearing small, loosely fitting dentures that trouble is likely to arise, as a fit of coughing or fainting or even drinking may dislodge them and so allow them to be swallowed. Should such an accident occur prompt treatment is necessary and if it is found impossible to remove the denture by the mouth or it fails to pass per rectum esophagotomy or gastrostomy should be performed, for if the plate be allowed to remain ulceration and hemorrhage are certain sooner or later to supervene, leading invariably to a fatal result.

THE TREATMENT OF ACUTE LOBAR PNEUMONIA.

By *Ramon D. Garcin, M. D.,*

Richmond, Va.,

Instructor in Practice of Medicine, Medical College of Virginia.

READ BEFORE THE RICHMOND ACADEMY OF MEDICINE AND SURGERY, FEBRUARY 9, 1897.

Prognosis.—Osler makes the statement, in his classical work, that "Pneumonia is one of the most fatal of acute diseases. Hospital statistics show that the mortality ranges from 20 to 40 per cent. Of 1012 cases treated in the Montreal General Hospital, the mortality was 20.4 per cent. It appears to be somewhat more fatal in southern climates. Statistics from the Charity Hospital, New Orleans, show the death-rate to be 28.01 per cent. It has been urged that the mortality in this disease has been steadily increasing, and attempts have been made to connect this increase with the expectant plan of treatment, but careful analysis of 1000 cases by Townsend, in the Massachusetts General Hospital, indicates clearly that when all circumstances are taken into consideration, the conclusion is not justified. He found that when all fatal cases over fifty years of age were omitted and those patients who were delicate, intemperate, or the subject of some complication, there was very little variation from decade to decade and that, excluding these cases, the rate was little over ten per cent. In answer to the assertion that the modified treatment is in part responsible for the increased mortality, he shows clearly that the rise in death-rate took place in the period prior to 1860, when the treatment was entirely or in great part heroic."

In a short interview with a prominent member of the profession, he made the statement to me that in a discussion of the mortality of acute pneumonia with Dr. Hunter McGuire, their experience with this disease was similar. They had never known a young adult, whose previous history was good, to die with pneumonia. A careful study of my notes of cases shows that, while I have

treated a good many cases, in healthy young adults, my limited experience has been the same as theirs.

Diagnosis.—"No disease is more readily recognized in a large majority of cases. The external character, the sputa and the physical signs combine to make one of the clearest of clinical pictures."—*Osler.* Dr. Osler says: "After a study, in the post-mortem room, of my own and others' mistakes, I think that the ordinary lobar pneumonia of adults is rarely overlooked. Judging from my autopsy records, I should say that errors are particularly liable to occur in the intercurrent pneumonias, in those complicating chronic affections and in the disease as met in children, the aged and drunkards. Pleurisy with effusion is, I believe, not often mistaken, except in children."

Treatment.—Wood and Fitz: "In the treatment of pneumonia, it is essential to recognize that, though the disease may be a unit from the pathological point of view, therapeutically it comprises essentially diverse diseases. A pneumonia whose physical signs can not be made out in the beginning, but gradually creep up towards the chest wall, a pneumonia whose expectoration is in the beginning prune juice, whose crepitant râle is never typical, whose physical signs are obscure until complete consolidation gives percussion dulness, or a pneumonia occurring in the alcoholic, in the old, in the victim of renal disease, in the broken-down debauchee, is, in its management, essentially distinct from a pneumonia the result of exposure of a strong, healthy countryman to a Western blizzard or other cold." "When, in the first twenty-four hours of a pneumonia, there is violent constitutional reaction, with flushed face, rapid and noisy breathing,

bloody sputa, intense headache and drowsiness, a hard, bounding, or a tense, corded pulse, venesection may markedly lessen all the symptoms, and, if combined with dry cupping over the whole chest, may, we believe, lessen the amount of engorgement of the lung and the final area of consolidation." Wet compresses, and even the application of the ice-bag very freely over the affected lung, are recommended by some of the leading text-books and authorities; and just at present the ice treatment is quite a fad at the North. At the very beginning of an attack, where active congestion is just begun, ice might prove of service, as it is of value in any other form of active congestion; but, even then, it should be, it seems to me, used with the greatest caution, if at all, because of the shock, more or less, and the causes calling for its indication should have to be very carefully selected. Personally, I have had no experience with it and shall certainly not use it, till I am fully convinced that the after-effects are not worse than the remedy. "The question how far we should attempt to reduce temperature is important in the extreme and is answered very differently in practice by different practitioners." Although a great many authorities advise against the use of any of the coal-tar class, my experience does not agree with their statement. When the temperature is $103^{\circ}-4^{\circ}$, I use, frequently, five-grain doses of phenacetine, repeated at regular intervals, until the fever is reduced to 100° or so, and never, as yet, have I seen any but the best results follow its administration. Quinine, it used, has to be employed in large doses and rather does harm than good, because of the resulting nervous excitation. I prefer the bisulphate or muriate.

"To prevent exhaustion, by maintaining the forces of the patient, is the great object of the nursing in pneumonia. Absolute confinement in bed from the beginning, regulating the temperature of room 70° to 74° , feeding at regular intervals (two or three hours),—food should be simple, nutritious and digestible; milk, animal broths, clam broth

is very acceptable." "Alcohol in the beginning of sthenic pneumonia is injurious. In the advanced stages of the disease, it being regarded therapeutically as allied to an infectious fever, it of service, employed judiciously." "In the advanced stages of a severe pneumonia, tinct. digitalis, 5 to 15 minims at intervals of four to six hours, acts well as a heart stimulant. Its effects upon the pulse should be the guide for administering."

Nitro-glycerine and amyl nitrite should be used with caution in sufficient doses to produce effects. They always lower the arterial pressure by depressing directly the muscle fibers in the blood-vessel's walls, and although their first action upon the heart is a stimulant, the slightest overdose converts such action into that of a powerful depressant. Carbonate of ammonium is very largely used, both as a stimulant and as an expectorant." Some authorities, among them one that I quote from very freely—Wood and Fitz—say, "there is no reason for believing that it has any effect on the consolidated lung, and that its power as a stimulant is certainly inferior." I must enter my humble protest against these assertions, for in several hundred cases of this disease I have treated in hospital and general practice, I can candidly say that I have found this drug of the utmost service, both as an expectorant and stimulant. My dosage is also at variance with theirs. They advise three grains or so; I employ five to ten grains, as indicated in the individual case.

Aromatic spirits of ammonia is also valuable as a cardiac stimulant when needed. The most important drug, in my hands, as a respiratory and circulating stimulant, is strychnine. "The special indication for the free use of this agent is cyanosis, with hurried breathing and other evidences of respiratory distress. For relief of local pain, dry cups probably give quickest relief."

Blisters, the greatest single agent in treating this disease, have saved more lives than all the drugs in the materia medica. If used skilfully and when indicated, that is, in the beginning of the

third stage, they will afford prompt relief from pain, aid the expectoration of the clogged lung, and very materially hasten convalescence.

In conclusion, allow me, from the limited time assigned me, to entirely disclaim originality for this paper. The great mass of it is quoted from authorities—Osler and Wood and Fitz. I have given them due credit for all their quotations, which are taken literally and liberally from their works.

Medical Progress.

THE CAUSATION OF SEX.—The determining factor in sex, says the *Lancet*, has always been the subject of controversy, but up to the present time, although numerous theories have been propounded, none can be deemed satisfactory and the causation of sex is still as much shrouded in mystery as is biogenesis. Perhaps one reason why so little progress has been made in the elucidation of this profound problem is the fact that there are so few opportunities of ascertaining reliable facts relating to the human subject in this connection. Be this as it may, there can be no doubt that experiments on animals with a view to clearing away the mist with which this question is obscured would greatly add to our knowledge of the subject and if the controversy which is taking place in the columns of our contemporary, the *Stock-keeper*, should have this effect not a little good may result. The theories which up to the present have been propounded are well known to readers of the *Lancet*, in the columns of which several attempts have been made to thresh out the subject; but a letter from Mr. J. F. Chambers in the issue of the *Stock-keeper* of January 8, in which he ably propounds what may be called the katabolic and anabolic theory, will be read with interest. He says the fetus passes through three cycles: (1) sexless; (2) hermaphrodite or bisexual; and (3) unisexual; and argues that at the second stage the "breeder may step in and enjoin nature to proceed after his wishes."

A METHOD OF TREATING ACUTE DYSENTERY.—In the *Therapeutic Gazette*, the following method, employed by Testevin, is mentioned. The objects which we seek in the treatment of this condition are, to diminish the number of the stools, to antisepticize and modify the intestinal secretions, to attack the local anatomical lesion, and to abate collapse.

The best method of decreasing the number of the stools is by the hypodermic injection of morphine $\frac{1}{2}$ grain, given every hour. At the same time, in the intervals between the injections the abdomen of the patient should be covered by a large mustard poultice, which will act as a revulsive and relieve the pain. In other instances an equally good result can be obtained by the use of a rubber ice bag applied over the abdomen. Intestinal antisepsis is best realized by the administration of calomel in frequently repeated small doses for two or three days, and it is often well to associate with it ipecac and opium. As soon as the stools are bilious in appearance this medication can be stopped and full doses of bismuth can be administered.

* * *

WIDAL'S TYPHOID TEST.—Comba (*British Medical Journal*) furnishes confirmatory evidences of the value of this test in thirteen cases reported by him. In every case of typhoid the reaction was positive; in other diseases it was negative. In the early days of the disease the reaction may fail. It is present during convalescence, although rather less marked. The bacillus coli gives a similar reaction, but much less marked, indeed not more than may be observed in patients affected with other infectious diseases. Each of the thirteen cases is more or less fully recorded.

* * *

VOMITING IN TUBERCULOSIS.—Barth prescribes, in the *Therapeutic Gazette*, for the vomiting of tuberculous patients, a wineglassful of vichy water after each repast, which should be light and simple. After meals he gives a cachet of prepared chalk, magnesia, binocide of manganese and belladonna; opium may be added if necessary.

MARYLAND Medical Journal.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

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BALTIMORE, FEBRUARY 27, 1897.

PREMONITIONS of a new spirit of progress in Maryland, of a quickening in the old life of civic and professional institutions, have of late years been brought to the attention of every intelligent medical man through the columns of the daily press and of this JOURNAL.

To the aid of those physicians who, loyal to their profession, have long striven, amid great discouragements, for its enlightenment and unification have gradually come of late many unexpected reinforcements. Successful city and State political reform movements, the quiet but powerful influence of the two branches of the Johns Hopkins University, the higher standards of medical education initiated by the older colleges at the suggestion of a modest city practitioner, the influx of well-trained young physicians from other States, the generosity of members of the Medical and Chirurgical Faculty and of the Messrs. Frick, have all contributed to bring the new era. Thence has sprung the new sanitary movement embodied in the recent Conference of Health Officers. A few years

ago it would have been but an aimless spurt; coming at the present juncture it is the beginning of a well-secured advance which will end in setting our State in the front ranks of sanitary excellence.

The reports to be given in this JOURNAL will reveal the value and scope of the work done. The conference met in the hall of the Medical and Chirurgical Faculty and was attended by large numbers of city and county physicians in addition to those specially delegated to it. The papers and demonstrations were every one worthy of the occasion, eliciting very lively discussions. It is evident that the county health officers are picked men in their communities.

Throughout the conference a spirit of fairness and desire for public improvement was evinced, and it is evident that the State Board has the coöperation of a very loyal corps of workers in its new measure. The Legislature will do well to heed the varied suggestions of the conference and consider well the bills concerning control of water and milk supplies, abatement of nuisances, regulation of burials, etc., which will be prepared by the Conference Committee.

Legislatures nowadays have timid souls, very fearful lest their laws should not be based on strong public opinion; therefore, our readers can aid greatly in the good work by noting carefully the improvements which the conference has deemed necessary, and bringing these needs to the attention of citizens and patients in their districts. When the Legislature meets, opportunity will doubtless be given for bringing direct pressure to bear upon the legislators.

Meantime it is to be hoped that the local sanitary officers of the counties, who have shown such interest in these public advances, will be encouraged by more earnest sympathy and coöperation from those practitioners who live near them. There ought never to arise any serious variance between intelligent health officers and public-spirited physicians concerning the need of sanitary improvements.

Kindly recognition should be given to the energy shown by the present Secretary of the State Board of Health; and a hearty welcome extended to the new-born Maryland Public Health Association.

President Gilman, of the Johns Hopkins University, was right when he publicly de-

clared the recent health conference to be "The most hopeful sign of progress seen in Maryland in twenty years—and one full of promise to all classes of the community."

THE advances in medical science have been manifold and on all sides is progress noted, but especially in the *Experimental Medicine*. department of experimental medicine has work been active and great interest has been taken in experimental work in the domain of pathology, pharmacology and physiology.

These have in part appeared to the profession in journals devoted to the especial branches of pathology, pharmacology and physiology, but in America, at least, there has been wanting up to a year ago a journal in which could be recorded the results of the immense amount of experimental work which has been done in such large schools as Harvard, Columbia, Ann Arbor, the Johns Hopkins and others.

The *Journal of Experimental Medicine*, which was established about a year ago under the auspices of the Johns Hopkins University, has just completed its first year and enters on its second with a feeling of great gratification and encouragement. As is stated in an introductory note by the editor, Dr. William H. Welch, "The purposes of this journal have already been realized in a great measure. The high character of the journal, the good quality of the typography, the abundance and general excellence of its illustrations, the absence of extraneous matter and its circulation at home and abroad have rendered it an especially suitable medium for the publication of papers embodying original research in the various departments of medicine presented in its pages."

The life of this journal for one year has demonstrated beyond the shadow of a doubt that not only is there an abundance of good scientific work done in America in medicine by American investigators, but that there are not a few subscribers who can appreciate such good work. While this journal appears under the wing of the Johns Hopkins University, it is by no means a local publication, as the list of editors and collaborators will show, and hence any words of praise and encouragement are meant not only for the progressive men who put their hands deep down

into their own pockets and undertook this great work, but for the many workers and contributors on it throughout this great land.

It is, therefore, fitting to say that while more subscribers have been obtained than was originally hoped for, the enterprise is by no means self-supporting, nor is it intended to be a money-making scheme, for the publication of such a journal involves many expenditures not covered by the subscriptions received.

The editor, therefore, makes a patriotic appeal to the profession at large and men not only scientific in the sense of practical workers, but intelligent readers who have been denied the pleasures and profits of laboratory work, but who take an intelligent interest in medical progress, should make it a point to take the *Journal of Experimental Medicine* and not only profit by the matter contained therein, but have the patriotic feeling that they are contributing towards the support of an American journal that stands inferior to none and superior to most.

EMULSIONS are usually associated in the mind with cod liver oil and are generally prescribed as the most palatable *Emulsions*. and easily digestible form in which to give this nauseous medicine. Dr. John F. Russell, in the *New York Medical Journal*, believes in emulsions but thinks they are as a rule badly made and contain too much inert and waste material. He believes instead of using mucilage and such substances to finely divide the oil globules, in imitating nature by using pancreatic juice. Emulsions made in this way contain more oil than ordinary emulsions and are not acted on by the gastric juice.

There is no doubt but that oil is not readily digestible and palatable even to the normal healthy organism and when it is poured into a diseased body in such large quantities, the results can hardly be salutary. Pure cod liver oil is generally given in too large doses, while in the ordinary emulsion much inert and foreign matter is introduced into the system.

An examination of the various emulsions under the microscope will show how finely subdivided the oil globules are and how assimilable such products are. Physicians should not take too much on faith, but occasionally make tests of their own.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 20, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		31
Phthisis Pulmonalis.....		24
Measles.....	1	
Whooping Cough.....	3	1
Pseudo-membranous Croup and Diphtheria. }	20	6
Mumps.....	7	
Scarlet fever.....	21	2
Varioloid.....		
Varicella.....	2	
Typhoid fever.....	7	1

Dr. E. T. Ellis of Richmond, Virginia, died in that city last Monday.

Dr. E. T. Getzendanner died at his home near Poolesville, Md., last Saturday, aged 73.

The new dead-house of the University of Maryland has been completed.

Dr. Michael A. Durdey, a retired physician of Cecil County, died last Saturday, aged eighty years.

In 1880, America had 183 medical journals and in 1895, 367, of which 343 were published in the United States.

About \$1700 was netted from the charity performance for the benefit of the University of Maryland Hospital.

Health Commissioner McShane has found more diseased cows in Baltimore and vicinity and has stopped the sale of milk from them.

Dr. William E. Moseley has a private gynecological hospital connected with his office, southwest corner of Howard and Madison Streets.

Baroness Hirsch is contemplating the desirability of giving 2,000 000 francs (\$400,000) for the erection of a hospital on the Riviera for consumptive children.

According to the *Bulletin of the American Academy of Medicine*, the only medical schools in Baltimore receiving official recognition in Connecticut are the Johns Hopkins Medical School and the Woman's Medical College.

The State Live Stock Sanitary Board met recently and formulated plans to employ a number of inspectors to stamp out tuberculosis in cattle in the State.

Sir Spencer Wells, past President of the Royal College of Surgeons, London, died recently, aged 78 years. He is principally known in this country in connection with his work on the ovary.

At the last meeting of the Philadelphia Neurological Society on January 25, 1897, Dr. Lewellys F. Barker read a paper entitled "Flechsig's Association Centers in the Cerebral Cortex."

Dr. William S. Thayer, Associate Professor of Medicine in Johns Hopkins University, Baltimore, will address the tenth quarterly special meeting of the Cleveland Medical Society on March 26.

The death is announced of Dr. Hugh Jenkins Prichard of Baltimore, son of Dr. J. E. Prichard. The deceased died on his twenty-eighth birthday. He studied at the College of Physicians and Surgeons and also the Baltimore University School of Medicine.

Dr. Irving C. Rosse of 825 Vermont Avenue, Washington, D. C., is so convinced that there is no such disease as hydrophobia that he has offered, over his own signature, a reward of \$100, in the interest of science, to anyone producing a well-authenticated case of that disease in man or dog.

The Baltimore Eye, Ear and Throat Charity Hospital will soon have a large new building next door to its present building on West Franklin Street, Baltimore. The hospital was established in 1882 and has prospered under the charge of Drs. Russell Murdoch, Samuel Theobald and H. Clinton McSherry.

Dr. E. N. Brush has made his annual report of the Sheppard Asylum for 1896. There were under his care at the end of the year 46 men and 33 women, a total of 79. Of those discharged, 17 had recovered, 12 were much improved, 23 were improved, 10 were unimproved and 9 had died. This report would make a still better showing if friends of the patients had not removed them injudiciously before the end of the treatment. This closes the work of the first five years of the institution and shows what excellent work has been done under the efficient guidance of Dr. Brush's skilled supervision.


Book Reviews.

**SWEDISH MOVEMENTS OR MEDICAL GYM-
NASTICS.** By Dr. T. J. Hartelius. Trans-
lated by A. B. Olsen, M. D., with introduc-
tion and notes by J. H. Kellogg, M. D.
162 pp. Price \$1.50. Modern Medicine
Publishing Co., Battle Creek, Michigan.

This book offers to the layman and teacher of gymnastics a long needed manual of exercises that can be given without the use of apparatus. It does not, however, meet the requirements of the practicing physician, who needs a work that discusses the human body from the physiological and pathological standpoint and which treats fully of the therapeutic effects of massage and exercise, with and without the use of apparatus. Still it is worthy of careful perusal by those interested in the subject. While reading the descriptions of the exercises, it is necessary to keep constantly before the mind the applied anatomy and the mechanism of the parts under discussion, in order to be able to fully understand the remote as well as the direct effects of the movements. It is to be regretted that the translator did not take greater liberties with the text, which would have enabled him to use terms that are technically correct rather than the incorrect literal translations. The work (while by no means free from error and demanding caution in the use of the prescriptions given) is a step, and a long step, in the right direction and Dr. Olsen deserves the gratitude of his co-laborers for performing a task which, at its best, is apt to be a thankless one. We would welcome an exhaustive textbook on Medical Gymnastics discussing its mechanism and therapeutics, along with the physiology, pathology and anatomy involved.

**A TEXT-BOOK OF DISEASES OF THE NOSE
AND THROAT.** By Francke Huntington
Bosworth, A.B., Cantab., A.M., M.D.,
Professor of Diseases of the Throat in Belle-
vue Hospital Medical College, New York,
etc. Illustrated with 186 Engravings, New
York. William Wood & Co. 1896. Pp.
814.

This is a condensation and revision of the author's work which appeared several years ago. The book has been thoroughly reviewed and brought up to date. It is divided into three sections. Section I is on Diseases of the Nasal Passages; Section II on Diseases of the Naso-Pharynx; and Section III on External Surgery of the Nose.

 **THE PHYSICIAN'S VEST-POCKET FORMULA
BOOK,** published by McKesson & Robbins,
will be found very useful to the practitioner. It contains a table of weights and measures, antidotes to poisons, various tables of reference and a very complete series of tables, showing the composition of foods and alcoholic liquors. These tables should prove valuable to the physician in cases where special attention to dietary is necessary. The book also contains an extended series of notes on some of the new pharmaceutical preparations and a complete list of formulae of the McKesson & Robbins Gelatine Coated Pills. A copy will be sent free of charge to any of our readers on application to McKesson & Robbins, 91 Fulton Street, New York.

THE LARYNGOSCOPE, published in St. Louis, has been selected as the official organ, for the year 1897, of the Laryngological Section of the New York Academy of Medicine. This selection, and the great probability of the same journal being chosen by other laryngological, rhinological and otological societies as their official organ, would indicate that the *Laryngoscope* has become what its proprietors stated they intended to make it, *i. e.*, The American Journal of Record for the specialties represented.

REPRINTS, ETC., RECEIVED.

Vegetable Dyspepsia. By W. A. Walker, M. D. Reprint from the *Therapeutic Gazette*.

Special Report of the Kensington Hospital for Women from its Organization in 1883 until 1896.

Pediatrics, Past, Present and Prospective. By S. W. Kelly, M. D. Reprint from the *Cleveland Medical Gazette*.

Remarks on the Cause of Glaucoma. By Leartus Connors, A.M., M.D. Reprint from the *Journal of the American Medical Association*.

The Solvent Properties of the Buffalo Lithia Waters of Virginia. By George Halstead Boylan, M. D. Reprint from the *New York Medical Journal*.

A Series of Articles on Speech-Defects as Localizing Symptoms, from a Study of Six Cases of Aphasia. By J. T. Eskridge, M. D., Denver, Colorado. Reprint from the *Medical News*.

PROGRESS IN MEDICAL SCIENCE.

"HAVING derived material benefit from the use of Tongaline during several years past, I feel it no less a duty than a pleasure to make the following statement in regard to it. All of the ingredients contained in this preparation have been demonstrated as especially valuable in neuralgia, rheumatism, gout and sciatica and the compound by recent observers has been noted as quite beneficial in relieving the pains incident to la grippe as well as nervous headache. Having made quite frequent use of it, as before stated, with most satisfactory results in some cases of acute rheumatism, in many of chronic and muscular, as well as neuralgic, affections, I have no hesitation in earnestly recommending it in similar cases and I know that in many cases of these affections I have saved my patients from the dangerous necessity of a resort to opium or its salts. Many other observers speak in most high terms of it after thorough and repeated trial."—DEERING J. ROBERTS, M. D. Extract from *Southern Practitioner*.

LARYNGEAL OR WINTER COUGHS.—Walter M. Fleming, A. M., M. D., Examiner in Lunacy, Superior Court, City of New York; Physician to Actor's Fund of America, etc., in giving his experience in the treatment of the above and allied disturbances, in the *Journal of Nervous and Mental Disease*, submits the following: "In acute attacks of laryngeal or winter cough, tickling and irritability of larynx, faith in Antikamnia and Codeine Tablets will be well founded. If the irritation or spasm prevails at night the patient should take a five-grain tablet an hour before retiring and repeat hourly until allayed. This will be found almost invariably a sovereign remedy. After taking the second or third tablet the cough is usually under control, at least for that paroxysm and for the night. Should the irritation prevail morning or mid-day, the same course of administration should be observed until subdued. In neuroses, neurasthenia, hemicrania, hysteria, neuralgia and, in short, the multitude of nervous ailments, I doubt if there is another remedial agent in therapeutics as reliable, serviceable and satisfactory;

and this, without establishing an exaction, requirement or habit in the system like morphine.

NOTES ON THE TREATMENT OF FECAL FISTULAE.—At the thirteenth annual meeting of the New York State Medical Association, which was recently held in New York City, Dr. Frederick Holme Wiggin of New York county presented a paper with the above title. The chief cause of the occurrence of fecal fistula was stated to be the delay in resorting to operative measures to which patients suffering from typhlenteritis, or strangulated hernia, were frequently subjected while their ailment was carefully diagnosed. The view recently advanced by a writer on the subject under consideration, that the best treatment for this condition consisted in its prevention, was concurred in. But in the case in which this mishap had occurred, it was pointed out that if the opening was of small size, was located near or below the ileo-cecal valve and no obstruction to the fecal current existed, operative measures might be deferred, as in most instances the opening would close in a short time spontaneously. On the other hand, if the bowel opening was of large size, was situated laterally, or some distance above the ileo-cecal valve, and was accompanied by the escape of a large proportion of the contents of the bowel, operative procedure for the closure of the opening should be speedily undertaken. The histories of three cases, successfully treated by surgical measures, were cited. In describing the technique employed, the writer laid much stress upon the following points, viz.: the thorough disinfection of the parts, including the interior of the bowel, with hydrozone, the closing of the intestinal opening, when possible, before the breaking up of the peritoneal adhesions, and the opening of the general cavity, the removal of any existing obstruction to the fecal current, the disinfection of the bowel surface with a solution of hydrozone, before and after the placing of the sutures, the control of oozing from the cicatricial tissue by the same means and the closure by a single row of silk-worm gut sutures without drainage of the abdominal wound after the washing of the peritoneal cavity with saline solution, some of which is allowed to remain.—Abstract from *Medical Record*, October 24, 1896.

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Original Articles.

SHOULD PHYSICIANS BE PAID FOR RETURNS OF BIRTHS, DEATHS AND DISEASES?

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

By George H. Rohé, M. D.,
Baltimore.

THE following considerations seem to me applicable in the discussion of this question:

Has the State, directly, or through the health department, the right to demand services from physicians without rendering compensation?

The right of the State to demand from any citizen certain services for the public good is inherent in what is comprehensively known as the "police power."

One phase of the exercise of this "police power" is the enactment of certain laws regulating the practice of medicine. In this State, for example, no person may practice medicine or surgery without passing an examination before an examining board appointed by the State. Persons found by the board incompetent are debarred from practicing this profession within the limits of the State. Some have held that the exercise of this power by the State was contrary to the letter or spirit of the Constitution, but courts have generally decided that this contention is not valid, and that the State, by virtue of the police power, can restrict the privilege of its citizens in this direction.

So, also, courts have held that under the authority of the same police power,

physicians can be compelled to report to the legally designated authorities the facts connected with deaths occurring within their observation. Similar decisions are on record relating to the reports of contagious or infectious diseases.

It may be assumed without argument that laws requiring the reports of diseases and deaths are for the public good. Conceding this, any citizen may be required to make such report. As physicians, by virtue of their professional knowledge, are the only persons who can give correct information, it is proper that the State should require them to make the report. Contrary to the opinion sometimes expressed, the State can demand such service without compensation. A Connecticut court has declared that "it is universally understood to be one of the implied and necessary conditions upon which men enter into society and form governments, that sacrifices must sometimes be required of individuals for the general benefit of the community, for which they have no rightful claim to specific compensation." (*Bradley vs. N. Y. & N. H. R. R. Co.*, 21 Conn., 306.)

It is conceded that the State has no right to take private property without

granting compensation, but it is doubtful whether a physician's knowledge or service in this particular would be considered as property. Indeed, courts are often disinclined to allow specific compensation for the special knowledge required of an expert called by the State in criminal cases.

The report of deaths and contagious diseases should be considered by the physician as a high public duty; one that he alone can satisfactorily perform, and for which he should scorn to ask or receive compensation.

Another aspect of the question of the report of contagious diseases is whether such report by the physician is a violation of professional confidence. Aside from the fact that State laws generally do not recognize the physician's knowledge gained in a case as a question of professional privilege, it seems to me that the principle does not apply here. The privilege to suppress knowledge of the existence of an epidemic disease which may, if not prevented, devastate a community, ought to be abridged. Suppose, for example, a case of bubonic plague, now raging in the East, were to succeed in evading quarantine, and come under the notice of a physician acting in his professional capacity in this city or State. Would any consid-

eration of professional secrecy justify him in suppressing the information, and thus subjecting the community, nay, the entire country, to the danger of infection by this pestilence?

And if the exotic plague can be reported without a violation of professional confidence, why not our domestic pestilences, scarlet fever, measles, diphtheria, whooping cough or typhoid fever? I believe the common sense of physicians will unhesitatingly reject the view that the report of contagious diseases is a violation of professional confidence.

There remains to consider the duty of physicians as reporters of births occurring under their care. The law in this and in a number of other cities requires them to make such reports. I am, and always have been, of the opinion that the law is unjust, and that it places a burden upon persons who should not bear it. The report of births and the calculation of the birth-rate of a community is not a medical or sanitary question at all. It is a question in demography. Let the parents of the child make the return to the bureau of vital statistics. The doctor, as well as the midwife, should be relieved of all responsibility in connection therewith.

CHLORALOSE.

CHLORALOSE is said to be a combination of chloral with glucose and is recommended as a safe hypnotic. Dr. James Tyson records his experience in the *University Medical Magazine* with it. In several instances it caused a kind of mania, in one case associated with great violence. He concluded that his doses were too large. He gave in one case five grains, which were repeated in a short interval without his permission.

From three to five grains he now considers the proper dose. It should be given preferably in solution, because the powder may lie undigested in the stomach, thus causing a repetition of the dose, and the first dose acting conjointly

may cause unfavorable results. It is readily soluble in hot water, but may better be taken dissolved in hot milk by those who can stand hot milk. It is best used in the simple insomnias and has been used with success in insane asylums. It acts, as a rule, promptly and the after-effects are usually not unpleasant.

* * *

AN INGENIOUS METHOD OF VAGINAL IRRIGATION.

THE *Medical Record* relates the case of an ingenious woman who, weary of wetting the bed in giving herself vaginal irrigations, hung a hammock in her bedroom, put a tub under the hammock, lay down and irrigated until the water gave out.

VITAL STATISTICS.

By Charles L. Mattfeldt, M. D.,

Catonsville, Md.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

My consideration of this subject is due to the absence of any means of collecting accurate vital or mortuary statistics from the counties of Maryland so as to enable the superintendent of vital statistics to collect and compile them as to make them of practical use. I consider nothing more important to a State or community than this. In Baltimore County we are not compelled to keep a record of births nor issue a death certificate unless the deceased is to be buried in one of the cemeteries in the limits of Baltimore City or unless death is due to contagious disease, in which case we are requested to send notice to the Secretary of the State Board of Health.

Under such a lax system how can the Superintendent of Statistics give any accurate information as to the prevalence of certain diseases in his community? Before going into details as to what I consider are the most important statistics and how, in my judgment, they can be collected, I wish to call your attention to the danger of not having suitable laws regulating the burial of bodies in the counties. I particularly wish to remark with what ease a body can be disposed of and to emphasize my remarks and bring them more clearly before you, will relate two suspicious cases which occurred in my county and which doubtless would have been investigated had they taken place in the city.

Some years ago a carriage stopped before the residence of a midwife and a woman was removed from it and carried into the house. A physician from Baltimore City visited her and in about one week she died and was buried, the utmost secrecy being maintained, no one knowing from what she died. The second case was an infant which died without medical attention, the parents reporting pneumonia. The body was

buried and nothing was thought of it as no burial permit was required. Some months later I was asked several pertinent questions by the mother of the child and from these drew deductions that the child had been smothered to death with a pillow. Several physicians of Baltimore City have alluded to this danger and were surprised that in the enlightened age in which we now live such a state of affairs should exist, especially in such close proximity to a large city.

Pardon me for this transgression and I now will proceed to consider what in my estimation are the most important statistics required for health purposes and how best to accomplish them.

1. The annual mortality, the causes of death and the mean ages at death.

These facts could be obtained by the adoption of a certificate of death similar to the one issued by the Health Department of Baltimore City (but of more convenient size, so as to enable one to carry it in the pocket, if necessary), making it the duty of the physician who attended the deceased during his or her last sickness, or the coroner, when the case comes under his notice, to furnish within twenty-four hours after the death to the undertaker or other persons superintending the burial, a certificate setting forth, as far as can be ascertained, the full name, sex, age and condition (whether married or single) of the person deceased, and the cause and date of death, also duration of last sickness, and it shall be the duty of the undertaker, or other person in charge of the burial of such deceased person, to state in the certificate the date and place of burial and having signed the same to forward it to the local health officer within twenty-four hours and that no interment of the dead body of any human being or disposition thereof in any

tomb, or vault, or cemetery, shall be made without a permit therefor, granted by said officers, and that said officers shall keep a record of such certificates and forward a copy of same every six months to the Registrar of Vital Statistics.

2. The births to population and the relative number of live and still-born children.

To accomplish this and also to make it more difficult to conceal cases of infanticide, it should be made compulsory on any physician, midwife, or other person in charge, who shall attend, assist, or advise at the birth of any child in said county, to report to the local health officer, stating distinctly the date of birth, sex and color of the child or children born, its or their physical condition, whether still-born or not, the full name, nativity and residence of the parents. The local health officer should also keep a record of these facts and forward a copy of them every six months to the Registrar of Statistics.

The importance of registration of births no one will deny. These records could be used as evidence in legal disputes involving questions of birth as to time and circumstances, such as legitimacy or illegitimacy of children and right of suffrage because of age or nativity. In my own experience I have enabled several widows to receive pensions who would perhaps not have received them, or have been unnecessarily delayed by want of evidence as to death of husband and birth of minor children, my private record being taken as evidence in such cases, especially as to ages of minor children, and, in fact, no other existed, as in several of these cases the parties not being able to write and did not even keep a record of such facts in their family Bible, which, I believe, is the family record book in the counties.

3. The annual rate of increase of population. This is no doubt the most difficult of all to procure. The census of population in the counties being taken every ten years only, to arrive at the annual increase from this must of necessity be extremely difficult; to procure such returns annually would be

well-nigh impossible, owing to the great amount of money required to accomplish it, as we have no police force sufficiently large to take a census as is done in Baltimore.

4. The amount of sickness to population. To secure data showing prevalence of various diseases is quite a difficult task, unless it should be made compulsory on physicians to report them to the proper officers.

In 1895, Dr. James A. Steuart, the then Registrar of Vital Statistics, attempted this by issuing prepared postal cards accompanied by a circular letter requesting physicians to fill out the cards and forward them to him, but with what success you can best learn by perusing the report of the State Board of Health for that year.

My plan of accomplishing this would be for the State to furnish every physician with a prepared record book in which to keep a record of his cases, which I think he would do for his own personal edification, as well as for the benefit of the State at large, and that he be required to forward a copy of this record on prepared blanks every six months to the Registrar of Vital Statistics. If the foregoing could be accomplished, I think the Registrar could so tabulate what he received as to make them of some practical use; while not as complete as could be desired, still this would be far better than what we now have. I ask you to give this subject your earnest consideration and by requesting the next Legislature to enact such laws that will enable the Registrar to collect and tabulate these statistics in such form as to make them a source of information for those interested in the health and welfare of our State.

An accurate record of such statistics is a great aid to the hygienist, who can, by glancing at the records, determine the health of a town or its neighborhood, trace the fatality of epidemics, ascertain the proportion of deaths to the whole population and the efficiency of preventive measures, and I as one individual will do everything in my power to assist in bringing about these results.

PERSONAL AND DOMESTIC PROPHYLAXIS.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1907.

By John D. Blake, M. D.,

Professor of Operative and Clinical Surgery, Baltimore Medical College.

PERSONAL and domestic prophylaxis presents such an enormous scope, and the time placed at my disposal to prepare for its proper discussion so short, that I almost shrink from the task imposed.

To properly treat so important a subject one should be a thoroughly equipped bacteriologist, a competent pathologist, a good sanitarian, a professional chemist, and a competent engineer. It goes without saying, therefore (as I do not pretend to claim any such equipment), that these subjects can only be very feebly treated by me on this occasion. What I shall say, therefore, will be along the line of personal experience, with practical suggestions as to the proper method of dealing with contagious diseases.

In the earlier days of hygiene when the cause of disease was less understood and the whole subject was in its infancy, it was thought a much more easy task to successfully deal with it than now. As bacteriological investigations go on, the more intricate and difficult does the subject become, and naturally so, because we find such a large per cent. of our cases which suffer from contagious diseases, so environed as to make the difficulties and obstacles which we find in our pathway to successful scientific treatment quite insurmountable.

The first obstacle, as a rule, with which we have to contend, is an uneducated and selfish laity. How often is it the case that we find it practically impossible to impress those having charge of contagious cases with the importance of isolation and disinfection. I am of the opinion that proper isolation and disinfection can never be successfully done in private practice until the laity is properly educated upon this point. To set out to accomplish this I

am convinced is not only our first and imperative duty, but a herculean task. You will doubtless say, "Yes, that is all so, but how shall we ever be able to accomplish such a desirable result?" My answer is, by precept, by example, and by law; and, I assure you, the last must not be the least.

How often is it the case that the physician on visiting a case finds the following condition of things to exist: A family composed of father, mother and four small children, in a tenement house, with but four rooms, parlor, kitchen and two bedrooms, at their disposal. Father at work, one child has diphtheria, the baby is still at the breast; the physician is informed that they are not able to employ a nurse, or even such assistance as would enable them to isolate the sick, and under no condition would they think of permitting their child to be taken from home to a hospital for contagious diseases, in the absence of a law compelling it to be done. Here is an environment, here is a picture, which I am sure is familiar to you all, and one which presents to the physician in charge such absolutely insurmountable difficulties that his heart fails him at once, and he says, I can only do the best I can, and what can he do; with the mother as nurse to the sick child, and nurse to the baby, cook, chambermaid, and last, but not least, disseminator of disease and death throughout the house and district in which she lives?

The difficulties in the way of isolation and disinfection here are so great, that the doctor only makes a faint effort at pretending to introduce, much less enforce, any such thing.

This should not be, and if the poor mother could be made to appreciate the fact that she was likely carrying around the house a concealed dagger, with

which she was putting to death one after the other of her loved ones, things might be vastly improved upon.

We should not only advise them, but insist on complete isolation. Parents have no more right to expose their own children to the contagion of disease, than they have to expose those of others to it, and I am sure there are none who would permit another to enter their home and mingle with their children under such circumstances, if they knew it.

The next most formidable obstacle which city physicians find in their way to isolation is the overcrowding in tenement houses and private families of large proportions, who are, by reason of poverty, forced to occupy small and unsanitary dwellings; it is here that the physician finds himself completely handicapped.

It may sound very strange to our rural members to hear that in cities especially, as Dr. Huntington says, we have unfortunately to deal with a civilization which overtasks and underpays wage-workers in order to add superfluous affluence and irresponsible power to the estates of the few; a civilization which helps a hundredth part of the population to own half of the property; a civilization which exposes innumerable women and children to moral ruin for a living, which drives pale, emaciated and rickety children daily from pestilential tenements to factories and stores; a civilization which countenances an owner of real estate who has pocketed millions of dollars by the rental of a dozen or more nests of misery and dens of vice five or six stories high; a civilization which lets thousands of children die within a year after they are born, in these cellars and garrets, without uttering a sound of indignation or regret; which robs the individual of his or her independence, enslaving them, by fear of want, to landlord and employer; this, truly, is not a civilization for any conscientious and well-thinking people to be proud of.

Dr. Homan of Missouri, in speaking of overcrowding in cities, says that one of the conditions incident to it is a very

high birth rate; this he attributes to an effort on the part of nature to meet the enormous waste of life, so that a margin may remain to prevent complete extinction, but he protests that the vital and moral quality of offspring thus produced gravely endangers society.

We all know that in cities tenement districts are known to the police officials as nurseries of crime, and are known to the sanitary authorities as breeding places of disease, and it has time and again been demonstrated that overcrowded tenements are foci of epidemic-contagious diseases which when once started cannot be stamped out until they have spread from poor to rich, and from district to district.

Thus it will be seen that natural laws cannot be successfully violated; if the rich and selfish oppress the poor and ignorant, they will surely have their reward, for, if in no other way, they will be rewarded by a visitation of contagious disease directly traceable to the sources above named, and from which they and a whole community cannot escape.

Hence it is a question of vital importance not only to the medical profession, but one which should actively interest the whole community. The laws now on the statute books bearing upon this question, in my judgment, are lamentably deficient, in that they deal only with the patient and his environment, and absolutely fail to apply to those who would and do make such environment possible.

You may build contagious disease hospitals; you may appoint sanitary officers — both of which are highly commendable things to do — but you will never stamp out contagious diseases until some law is passed by which men are restrained from building new or converting old, dilapidated buildings into tenement houses, into which men, women and children are crowded *ad libitum et ad infinitum*, without the least restriction or requirement.

Men who for the sake of the almighty dollar feel called upon to dot the city over with these dens of vice and incubators of disease should be made to

know that they would be held strictly to account for the results of their labor.

My opinion is that if the people fully appreciated the importance of this question, popular sentiment would be so strong against it, that it would take a brave man indeed who would undertake to locate one in any community, whether the inhabitants thereof be rich or poor. Here, then, is the field for practical work on the part of the profession in teaching the rich, poor and ignorant as to their duty in the premises.

If it is proposed to locate a contagious disease hospital, or a hospital for any purpose, in any part of the city, people for squares around will set up a hue and cry as if a wolf were at their very door, although they were equipped with all the latest improvements and manned by the most intelligent physicians and trained nurses.

Yet some irresponsible individual will locate a tenement house in some alley or lane, at the very back gate of some of these people, which would be a thousand times more dangerous, and not one word of complaint is heard from them or those in the immediate vicinity. To what is this due? The only answer is, ignorance.

If the people could be educated up to a point where they could fully appreciate the danger of these pest-houses, their attitude toward them would be different, and I doubt whether one could exist in any community.

I would advise the enactment by the proper authorities of a Public Health Law, as follows: The first section of the act should regulate and prescribe the conditions upon which a permit could be issued for the erection or remodeling of any building which is to be used as a tenement, and the work should be done under the supervision of the health officer and the corporation's engineer and building inspector.

Another section should give the health officer absolute power to prevent the overcrowding in small and badly constructed houses located in either street, lane or alley — a condition so prevalent

in this city today and one which is so fruitful of disease.

Another section should absolutely proscribe, under heavy penalties, the dens of misery, shame and death, known as infant boarding houses, so common in the lanes and alleys of the cities of our State, where infants are taken with the hope, if not almost the tacit understanding, that they are to be starved to death. This section should also make it a crime punishable by heavy fines and imprisonment, for the health officers to permit such houses to continue to exist, or the owners to rent or permit their houses to be used for such purposes, the infants in such cases being, for the most part, the offspring of working women and servant girls who pay paltry sums from their meager salaries for their support.

Another section, in addition to the law now existing which requires physicians to report the existence of contagious diseases, should be enacted, whereby the parent, guardian, or those in charge of the premises upon which contagious diseases exist, should be required, under penalty, to report promptly to the health officer the termination of the disease; upon the reception of such notice the health officer should be required to see that the house or any part thereof which, in his judgment, needs the same, should be properly and thoroughly cleansed and disinfected, and any articles therein contained should be subjected to the process of cleansing and disinfection, or complete destruction. This I consider one of the most important steps in the management and control of contagious diseases. It should, therefore, be done thoroughly and under the direct supervision of a competent physician.

I would therefore urge upon the authorities the importance of having the all-important and responsible positions of sanitary inspectors filled by physicians. It is not only unreasonable, but preposterous, to expect men who know nothing of bacteriology, or the effect of germs upon the system, to scientifically and successfully fill these important positions.

The present method of disinfecting is entirely too crude and commonplace. My opinion is that to properly and thoroughly disinfect a room all paper should be scraped from the walls, if papered, and carefully burned; if not, the walls should be scraped and afterward two coats of whitewash should be applied; the floor, washboards, doors, door frames, windows and window frames should be thoroughly scrubbed with water and concentrated lye, after which a coat of paint or varnish should be applied; all articles of furniture should be painted or varnished and all bed clothing, beds and other articles in the room should be subjected to sterilization by steam.

The law should also provide for an infectious disease hospital; (and I would say in passing that it is a burning shame that the earnest appeals of our faithful and efficient Health Commissioner for such a hospital have been so long disregarded by our municipal legislators;) it should also provide a suitable ambulance by which infectious persons could be transmitted to the hospital.

The law should be so framed that the authorities would have power, with the advice and consent of the family physician, and where it was clearly shown that isolation and disinfection were impossible at home and danger of contamination great, to remove such cases to the hospital, where, if they so desired,

the family physician could follow and continue in attendance upon the patient. This provision of the law, I think, would tend to greatly lessen opposition to it on the part of parent and physician.

In houses where such diseases have existed and the people moving out soon after the convalescence of the patient, the owner or agent should be restrained from renting the premises again until he had obtained a certificate from the authorities showing that the house had been properly disinfected and cleansed.

No auctioneer should be allowed to sell second-hand bedding or bed-clothes without the owner showing a certificate of the health authorities to the effect that no contagious disease had existed in the house from which they came.

It should also be a misdemeanor, punishable by fine and imprisonment, for any owner to sell bedding, bed-clothes, carpets, or any article of clothing to any second-hand dealer or other person, he knowing them to be from a house in which contagious disease did at the time or had recently existed.

It should likewise be a misdemeanor for any person to buy or expose any second-hand article of clothing for sale, without first obtaining a certificate from the health authorities as to their sanitary condition.

As there is to be a paper read before you on School Hygiene, I will not discuss that subject here.

IRREGULAR EATING.

THE editor of the *Medical Record* is a man who notes every-day facts in a very convincing manner. In talking of the Sunday penalty of irregular feeding, he says: An invitation to gastric disorders is issued every seventh day by ninety-nine per cent. of the people of this country. Once in seven days comes our so-called day of "rest"—the day on which the regular meals at morning, noon and night are replaced by a vicious system of late rising and abstinence, followed by gluttony. The gastric secretions know nothing of a seventh day

of rest. They are ready at the customary six-day morning-breakfast time, but no food comes to them and they are absorbed. A second period of the day comes and the same process is repeated, with the additional injury that from two to four hours after the customary meal the stomach is loaded unusually full of food, whereas the secretion is no longer there in sufficient quantity to digest it. The result is the regulation Sunday afternoon discomfort of gormandizing, with the accompanying absence of appetite for the evening meal. What wonder that next day is "Blue Monday!"

Society Reports.

CONFERENCE OF HEALTH OFFICERS OF THE STATE OF MARYLAND.

HALL OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

HELD FEBRUARY 17 AND 18, 1897.

FIRST DAY, WEDNESDAY, FEBRUARY 17.
MORNING SESSION.

THIS first conference of physicians interested either officially or professionally in the promotion of sanitation in Maryland was the outcome largely of the efforts of Dr. John S. Fulton, the new secretary of the State Board of Health. There were present at the opening of the conference about seventy members and visitors representing the Johns Hopkins University and Hospital, the State Board of Health, the City Board of Health, the School Teachers' Association and the School Board of Baltimore. The morning session of the first day was opened at 11.20 by Dr. E. M. Schaeffer, the chairman of the Faculty's Committee on General Sanitation, at whose invitation the conference was held. He called the meeting to order and said: It has long been recognized by statesmen that the consideration of health is worthy of the first thoughts of the people and we are glad to be inaugurating here a meeting that has for its object the promotion of health and which begins under such favorable auspices, with delegates present from every county in the State. We are only too glad to welcome so many from the remote parts of the State and the more remote the more glad we are to see them. We have the co-operation of the Johns Hopkins University, the State Board of Health, the Health Department of Baltimore City, the School Board, the School Teachers' Association and we hope later to receive delegates from the Arundell Club. The question of vital statistics will be brought up for discussion and I will say just here that every one regards such statistics as the basis of sanitary reforms. They are to us as useful as book-keeping to the merchant; in fact,

it might be called sanitary book-keeping. Gentlemen, we shall have as our presiding officer today the Chief Executive of the State of Maryland and I now take great pleasure in introducing to you Governor Lowndes.

Governor Lloyd Lowndes, the honorary chairman, made the opening address, dwelling upon the importance to the State of the new movement for more active public interest in hygienic matters and congratulating Drs. Fulton and Schaeffer and those of the State and city health boards associated with them upon the success of their efforts. The hope was expressed that similar movements for hygienic advance would be undertaken in every county of Maryland. He then presented Dr. William Osler of the Johns Hopkins Medical School, to whom was assigned the address of welcome.

Dr. William Osler: Mr. Chairman and Gentlemen, it is no new thing for the ancient and honorable Faculty of Maryland to take an interest in health matters. If you look through its records for a hundred years you will find that it has always been the trusted adviser of the people of this State in all times of peril. Into the history of the part that has been played by the Faculty in health matters in this State time will not permit us to enter, but I may call attention to the fact that this is not the first conference that has been held under its auspices. From this society we speak in an authoritative manner to the people of the State and here in this hall matters may be discussed in reference to the health of all parts of the State and an organization should be fostered which will be recognized in all the different counties as the highest authority upon vital statistics and health.

It seems to me there are three or four things in which we should attempt to guide the public. The first is the re-organization of the State Board of Health; an organization on a basis that should have the counties as an essential element, so that in each county there should be a paid official of the State Board of Health, an officer not of

the county only, but of the State, and who should be paid by the State to take charge in his district of all matters relating to vital statistics and to health. An organization of that kind is really the ideal plan towards which we should work, but we cannot get it without first educating the public. There is no use in going to the legislature until we first go to the people and the people through the State should see that their representatives are fully made aware of matters relating to health and vital statistics.

The second relates to the lunacy laws. When I say that there are nearly five hundred insane people in the almshouses and jails of this State, I add that it is a reflection upon the intelligence of the people of Maryland. I say that because it is recognized the world over, that insane people must be taken charge of by specialists and must not be herded together in jails and almshouses. They are the children of the State and should not be cared for by the ordinary physician, who may be able to treat typhoid or scarlet fever well enough, but has no idea how to treat special diseases of the brain. I make no reflections upon the almshouses of this State, but I say that no physician who has not had special training is capable of treating lunacy properly. I might say also that it would save thousands of dollars to the State if all the insane were properly treated by specialists.

The third point is in relation particularly to the health of Baltimore. Baltimore needs a great deal, but it needs first proper milk inspection. In this city of half a million people we have no control over our milk supply. It is an essential element of the health of this city that the State and city health boards should have an active control in the inspection of every dairy that sends milk to Baltimore.

Another important thing is a hospital for infectious diseases. That is recognized as a necessity in every city and it will come here in course of time. A more important matter is the proper control of our water supply and that must be had at the earliest possible

moment. These questions may be discussed here and they will engage the attention of the Faculty for the next few years.

Dr. S. C. DeKrafft of Cambridge, President of the State Board of Health, then responded to the Address of Welcome. He claimed that lack of funds was the cause of the previous incompleteness of the statistical records of the Board and regretted the defectiveness of State laws, which permitted much loss of life that might be prevented. He hoped that this Conference may be fraught with great benefit to the State.

Dr. John S. Fulton of Baltimore then read a paper on VITAL STATISTICS. (See page 347.)

Dr. Charles L. Mattfeldt of Catonsville also read a paper on VITAL STATISTICS. (See page 367.)

Mr. Charles B. Rogers of Towson opened the discussion of the morning's papers. He thought that in securing reports of infectious diseases, public school teachers, apart from the doctors, should be required to send in to the School Commissioners monthly reports of all the cases of contagious diseases coming to their knowledge through association with the scholars (occurring in the scholars' homes or affecting the scholars themselves). The School Board should then communicate with the Health Board, coöperating with it for the public good.

Dr. F. H. Thompson of Annapolis thought that physicians did not send in reports because they were not paid for them. When he could get timely notices from epidemics he had several times succeeded in checking the epidemics.

Dr. A. K. Bond thought that more confidence in the health officer was needed. He spoke of the necessity for having physicians as inspectors and related his experience with drunken and ignorant inspectors.

Mr. H. G. Weimer of Cumberland, Public School Examiner for Allegany Co., said he had come two hundred miles to attend this Conference through his interest in the welfare of the nine thousand children who had

been committed to his care in recent years. All advance in domestic and school hygiene and in the control or prevention of infectious diseases works for the welfare of the children. He spoke later of the injustice of fining the county school teacher ten dollars for every unvaccinated pupil admitted. It sometimes deprived her of her living (so many families objected to the vaccination); yet the children continued as before unvaccinated, no effort being made directly to vaccinate them.

In reply to the statement of Dr. J. H. Billingslea of Westminster, Md., that the physician should be compelled to simply hand a blank report to the householder to fill up, because other physicians, jealous of him, would unfairly criticize any report he himself should send in—

Dr. August Stabler of Brighton, Montgomery Co., said that in country districts the householders were, many of them, incapable of filling out such a report in a manner satisfactory to the health authorities.

Dr. A. K. Bond then related a case in which the stools of a typhoid patient were thrown out and carried into Lake Roland to be distributed to the people of Baltimore.

Dr. T. A. Councell, health officer of Easton, said that the school teachers of Easton willingly reported to him cases of infectious disease. He thought that Easton would greatly advance in health matters.

Dr. W. J. Todd of Mt. Washington said that he also found the public and private schools very ready to coöperate with him in these matters, even to the extent of inspecting their throats for possible diphtheria in cases of epidemics.

Dr. E. T. Bishop, Smithsburg, said that he had found that his explaining to the family in the mountains that a case of disease was smallpox was followed by the community dispensing with his services during the duration of the case. The less publicity given to the diagnosis of such a case the better if the doctor wished to make a living out of medicine.

Mr. Charles Hartshorn of Brighton,

Montgomery Co., gave a description of the very satisfactory working of the local Board of Health of Olney District, at the quarterly meetings of which each member reported on the health of his neighborhood. A summary of these reports was then sent to the State Board of Health. He thought local boards of health were very desirable all over the State, and should be encouraged or established by our State board. Physicians would not hesitate to report to such a local board, while they would hesitate to make these matters more public. He thinks these local boards should be organized by districts, rather than by counties. In regard to the need of burial laws in the counties, he told of cases where, among the ignorant, even after warning of the danger from the physician, the parents had had large funerals with open coffins in diphtheria cases.

Dr. J. McP. Scott of Hagerstown spoke of the need of carrying out of vaccination in the county schools. He, as health officer, was determined to enforce the law, however great hardships it worked to teachers. He considered that the report of a physician that he had vaccinated, when he did not know whether the vaccine took or not, was useless.

Mr. Charles B. Rogers of Towson said previous vaccination of children must be reported and sworn to by teachers, in Baltimore county. He wished to know if the law could compel a child to be revaccinated after years; otherwise, was the child really protected?

Dr. Scott of Hagerstown thought the teachers were there for the purpose of teaching the children, not of examining scars or inspecting throats.

Dr. Owings of Ellicott City thought the subject of vaccination was very important. He thought vaccine physicians should go to the schools, vaccinate arms destitute of proper scars, and at a subsequent visit inspect those arms to see whether they had "taken."

Dr. W. A. Duvall of Baltimore favored local health boards, with paid medical inspectors of schools.

Dr. C. G. Stuart of Oxen Hill asked

who was to carry out (and enforce the penalty of) the State law requiring vaccination of all children under eighteen months of age. He thought the answer was, "a local State board." As local health officer he insists on the householders carrying out the law. He finds that when he writes to the State vaccine physician for virus he cannot get it. So other county physicians must be handicapped by lack of good vaccine.

The discussion was continued for quite a time, the members of the conference and numerous visitors to whom the courtesy of participation was extended manifesting the liveliest interest in the sanitary matters brought forward. A member, Dr. Mattfeldt, suggested that it would be well for the State Board to send suitably arranged record books for enumeration of infectious disease treated to those physicians in the counties who would consent to use them. From this source semi-annual statistics of value might be obtained.

Medical Progress.

PICRIC ACID IN BURNS. — D'Arcy Power, M. D., F. R. C. S., gives to the *British Medical Journal* his method of using picric acid in the treatment of superficial burns and scalds as follows:

The solution of picric acid is made by dissolving a drachm and a half of picric acid in 3 ounces of alcohol, which is then diluted with two pints of distilled water, or more accurately: Picric acid, 5 g.; alcohol, 80 g.; dissolve; add 1000 g. of distilled water. This is a saturated solution of picric acid.

The clothing over the injured part should be gently removed and the burnt or scalded portion should be cleaned as thoroughly as possible with a piece of absorbent cotton wool soaked in the lotion. Blisters should be pricked and the serum should be allowed to escape, care being taken not to destroy the epithelial surfaces. Strips of sterilized gauze are then soaked in the solution of picric acid and are so applied as to cover the whole of the injured surface. A thin layer of absorbent cotton wool is

put over the gauze and the dressing is kept in place by a light linen bandage. The moist dressing soon dries and it may be left in place for three or four days. It must then be changed, the gauze being thoroughly well moistened with the picric acid solution, for it adheres very closely to the skin. The second dressing is applied in exactly the same manner as the first and it may be left on for a week.

The great advantages of this method of treatment are: First, that the picric acid seems to deaden the sense of pain; and, secondly, that it limits the tendency to suppuration, for it coagulates the albuminous exudations and healing takes place under a scab consisting of epithelial cells hardened by picric acid. A smooth and supple cicatrix remains, which is as much superior to the ordinary scar from a burn as our present surgical scar is superior to that obtained by our predecessors, who allowed their wounds to granulate.

I have used this method for more than a year in hospital practice both amongst out-patients and in-patients and I have every reason to be thoroughly satisfied with the results I have obtained. It is not an ideal method, for it stains the clothes and discolors the hands of the surgeon, but it is a great improvement upon anything else I know of.

* * *

MAL-PRESENTATIONS. — A physician, writing to the *Medical Brief*, gives the following unique account of this method of correcting the faulty position of a fetus:

Ten years ago I was called hastily to the bedside of a woman who had been in hard labor over ten hours. A mal-presentation of the child was discovered by the attending physician, who was a young and rather inexperienced man. On arrival at her bedside I discovered the left shoulder, neck and part of the side had been forced down and out of the vulva by the severe pains. In this extremity I had to do something immediately to remedy the disastrous state of affairs. The simplest thing I could think of or suggest was to put the woman on a door, lower her head and raise

her feet almost to standing her on her head. With assistance of the doctor and two women I held her in this position nearly half an hour; gave her several doses of lobelia and gelsemium to relax all the muscles; with my hands manipulated the abdomen and the mal-presenting parts. After a while I found the whole presenting parts had re-entered the uterus, which latter, by force of gravity, had passed up into the abdomen. I then by degrees laid her horizontally, finally returned her to bed, and in an hour more the head presented under returning pains. The child was delivered safe and sound. Here is a pointer not to be slightly passed by.

* * *

GONORRHEAL ARTHRITIS.—In the *Bulletin of the Maryland University Hospital*, Dr. John S. Fulton gives a clinical lecture on this subject in which he says that gonorrheal arthritis is in no sense a rheumatism and the expression is a bad one. The inflamed joint is related more to the gonorrhea than to the rheumatism and the misnomer is misleading. True rheumatism attacks several joints at once or successively and the joints will get well about in the order in which they were attacked, while gonorrheal rheumatism usually begins in one joint and though others may be attacked the first joint usually continues painful. The knee or ankle is affected by preference. In gonorrheal rheumatism the urine and the skin are not affected, while they are in ordinary rheumatism; heart complications are rather common after inflammatory rheumatism, while after gonorrhea the heart is not often attacked, although we now find that it is more often affected after gonorrhea than was formerly believed. Gonorrheal rheumatism is more protracted and more obstinate but less painful than ordinary rheumatism. Women may have gonorrhea with little discomfort and in the same way a gonorrheal rheumatism in women may be overlooked. The gonococcus is found in the serous effusion in the joint. Anchylosis may follow a bad case of gonorrheal rheumatism. The

prognosis is usually good. Treatment amounts to little. The salicylates are of no use. Morphia should be used if the pain is bad.

* * *

FORMALDEHYDE.—Von Hoffman discovered formaldehyde in 1868 by passing the vapor of wood alcohol mixed with air over finely divided platinum or copper. It has recently been put to practical use.

The subject has been carefully studied of late by Passed Assistant Surgeon, U. S. M. H. S., J. J. Kinyoun, and his work is published in the *Public Health Reports*. First experiments were tried on cultures. Ordinarily formaldehyde solutions exposed to the air will penetrate all parts of a small space, but in a large room a certain quantity of gas and vapor was lost and the liquid becoming condensed by evaporation, a yellowish-white amorphous powder is the result.

By using a bell-jar and a vacuum apparatus more of the gas could be obtained. When the gas thus formed was liberated it was very penetrating and effective. Without going into detail it may be said that Dr. Kinyoun devised an apparatus by which rooms, shipholds and almost every kind of article could be disinfected thoroughly in a short time and with no risk or danger. The production of formaldehyde is so inexpensive and it is such a valuable germicide that it will probably be generally used in the future instead of sulphur fumes.

* * *

PARALYSIS OF THE ULNAR NERVE FROM CYCLING.—Destot (*British Medical Journal*), after a long bicycle ride, suffered from paresthesia of the ring and little finger and loss of sensation to puncture and to touch, as well as paresis of the interossei, lumbricales and adductor muscles. These effects were due to pressure of the nerve branches between the handle of the bicycle and the pisiform bone. The author believes that the obliquity of the handle bar was the chief cause; for this reason he suggests a strictly transverse bar, as the pressure then is thrown on the deeper and better protected parts of the hand.

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WHILE the normal body temperature is said to be about $98\frac{2}{5}$ ° F. it does not remain at that point during the

The Hour of Death. whole twenty-four hours, but there is a normal curve of health showing that sometimes during the day the temperature may be below and in some it is above that point. The balance between heat production and heat loss in a healthy individual is so well maintained that within these narrow limits the temperature varies very little whether the individual be in a cold or a warm room, indoors or out. There seems to be also times in the day when the body possesses a lowered vital resistance beyond that of other times.

In this connection, a writer in the *British Medical Journal* has tried to collect some statistics on the hour of death and while they may have little practical value, still they are of interest. Taking 1000 deaths in an institution and drawing deductions from these, this investigator found that the greatest rise in the death rate was between five and seven in the morning for men, while for women the most fatal hour was between six and seven

in the evening, but among the women there was not that preference for any fixed time so well marked as among men.

The experience of many persons in private practice and in hospital would tend to show that the hour of death occurred most usually an hour or two after midnight and about six in the evening. There, therefore, must be some reason aside from the disease itself to bring about these facts and most certainly it would show that the time of least vital resistance corresponds most nearly to the hours when death is said most frequently to occur.

From this, little may be learned except that the invalid should be watched especially at these periods of the day and by rest and nourishment be tided over such depressing periods.

A PHYSICIAN'S work is naturally unselfish and a conscientious man is often too ready to forget himself for others. Dr. John W. Teale gives a few hints in the *British*

Medical Journal to medical men on the preservation of their health. He thinks there are many things which are certainly conducive to a physician's success and one of these is a power of concentration with a command of temper.

Even very ill persons notice when the physician does not treat all their complaints or hear their questions and they naturally do not like lack of attention. Again, when the physician is tired out and unstrung he is naturally often irritated by the patient's querulous complaints.

Now to be able to come up to the standard in these two requisites, a simple, healthy life with exercise is necessary. To keep in health it is not necessary to devote a large part of each day to physical exercise, but ten minutes a day on rising or retiring with light dumb bells will accomplish wonders. Regular meals, if possible, and if not, then a light soup is refreshing at odd times. Stimulants, except on rare occasions, are unnecessary. They too often lay the foundation for a tippling physician, who soon loses his practice and the respect of the community. A cold bath in a warm room is a great invigorator. The underclothing should not be too heavy. It is also recommended that the teeth be

looked after, for an aching tooth is sure to ache harder when the person is most wearied.

Physicians, as a rule, do not take care of themselves. They say, "Do as I say and not as I do." Eating late at night is absolutely necessary if there is great fatigue. It is hard to lay down a fixed rule for everyone, for "what is one man's meat may be another man's poison," but as a rule, physicians can and should look after their own health for the sake of their dependent families, if not for themselves.

* * *

EVERY physician of experience knows the difficulty of determining the nature of an eruptive fever before the eruption is well out upon the skin. Yet it is but reasonable to expect that with the advance of medicine clinical investigation will render it possible for the expert to identify these diseases at a period at least as early as the beginning of infectiousness. For this end it is evident that extreme precision of study will be necessary.

That these fevers have rashes in the mouth and throats is well known, and many are aware that these mouth and throat rashes often precede the eruption upon the skin by half a day or more, thus aiding in the diagnosis of certain difficult cases. Heretofore, however, the existence of this rash on the mucous membrane has been used chiefly in the distinction of local or general skin eruptions from those of eruptive fevers.

In the *Archives of Pediatrics*, December, 1896, Dr. Koplik of New York attempted to show that there is in measles a mouth eruption, preceding by a day or more the skin eruption; that it is found in measles alone and has very definite characteristics. It is not located in or about the fauces, which are more or less congested and red-spotted in many sorts of fever. It is located only on the mucous membrane of the lips and cheeks. It consists of small, bright-red spots, in the center of each of which strong daylight reveals a minute bluish-white speck. There may be as few as six of them or they may cover the whole inner surface of lips and cheeks.

This eruption appears in the first twenty-four or forty-eight hours of the stage of invasion and lasts several days. By the time the skin rash is well-marked these isolated

spots of red have been submerged in the general tide of redness which has spread from the fauces over the whole mouth, while the bluish-white dots still persist.

Dr. Koplik has not found the spots in rubella (German measles), scarlatina or influenza. Aphthae are less red, lack the bluish-white speck and get yellow in the center. Muguet spots are white, not bluish-white. Dr. Koplik has (if his observations can be endorsed by further study) not only given a most valuable diagnostic contribution but taught a lesson in minute observation.

* * *

BECAUSE the house surgeon in a hospital in Williamsburgh, New York, charged the widow of a patient a fee of twenty-five dollars for filling out a certificate by which she was enabled to recover insurance on her late husband's life, the executive committee of the hospital was aroused to investigate. This is a question which belongs as a side issue to the dispensary and hospital abuse question.

Those who take no interest in, or know nothing of, this question, or who are independent of hospitals, always uphold any charity for the help of the poor without considering whether it is actual help or whether it is pauperizing the poor patients and perhaps taking practice from poor physicians. It has always been a custom in most hospitals and even in the almshouses to make a charge to a patient's family for signing any papers by which the beneficiaries of that patient obtain money, and why a board of hospital trustees should take time to consider that question is not easy to see.

There seems to be a desire on the part of some to pay all persons connected with any institution except the medical staff, which is supposed to do its work for nothing and be glad to have the opportunity to contribute that much to charity. The sooner this idea is dispelled the better for the profession and perhaps for the people.

When a man makes a charge for a service rendered and there is money to pay and the demand is followed up by payment, he usually obtains more respect than the one who gives his services away and thus belittles his work. Let physicians be charitable where such charity is deserving, but let them not fail to stand up for their own rights.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending February 27, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		24
Phthisis Pulmonalis.....		14
Measles.....		
Whooping Cough.....	4	3
Pseudo-membranous Croup and Diphtheria. }	17	1
Mumps.....	4	
Scarlet fever.....	18	
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	1	1

Georgetown University will soon have a model hospital.

Dr. Robert H. Power died at Newport News last week, aged 73 years.

College Day at the Woman's Medical College was a grand success.

The Maryland Public Health Association will hold two meetings a year.

Washington is taking steps to prevent a pollution of her water supply.

The police of Baltimore are enforcing the sweat shop law and arresting the violators.

The District of Columbia will have over \$100,000 appropriated for a site for a contagious hospital.

Dr. Henry Hartshorne, a graduate of the University of Pennsylvania in 1848 and formerly of Philadelphia, died recently at the age of 73.

The County Medical Association of New York had a special meeting last week to consider the important subject of hospital and dispensary abuse.

A society is being organized in New York for the purpose of testing the efficacy of music as an aid in the treatment of certain diseases.

Dr. H. B. Bibble, Sr., a well-known physician of Blacksburg, Virginia, died last week at the age of ninety-two. He practiced until a few years ago.

The Medical Association of the District of Columbia is waging war on dispensary and hospital abuse.

The successor of DuBois-Reymond in the chair of physiology at the Berlin University will probably be either Professor Munk of Berlin, or Professor Kühne of Heidelberg.

The Berlin Medical Society, on January 6, unanimously re-elected Professor Virchow as President. Professor Virchow opened the meeting with a speech in memory of Dr. Du Bois-Reymond.

Dr. Alexander C. Abbott, professor of hygiene in the University of Pennsylvania, has been appointed chief of the bacteriological division of the Philadelphia bureau of health in succession to Dr. B. Meade Bolton, resigned.

Dr. C. L. Mattfeldt, sanitary officer for Catonsville and vicinity, has written to the Commissioners offering to inspect all the schoolhouses in the First district and also to see that the children attending the schools are successfully vaccinated.

According to the *Medical News*, Dr. Osler of the Johns Hopkins University read a paper before the New York County Medical Society on Monday evening, February 22, on the "Diagnosis of Malarial Fever." During his remarks in the discussion that followed, he made the somewhat startling assertion that death from malaria in the region north of Mason and Dixon's line is almost unknown.

The Baltimore Medical Association has elected the following officers for the coming year: President, Dr. James E. Gibbons; First Vice-President, Dr. W. A. B. Sellman; Second Vice-President, Dr. J. T. King; Recording Secretary, Dr. Eugene Lee Crutchfield; Corresponding Secretary, Dr. C. Urban Smith; Executive Committee, Dr. Joseph T. Smith, Dr. W. E. Wiegand and Dr. J. L. Ingle.

Passed Assistant Surgeon H. D. Geddings, United States Marine Hospital Service, was appointed by the President on February 8, 1897, technical delegate on the part of the United States to participate in the sanitary conference at Venice, Italy, and to aid and advise the representative of the United States in attendance thereon. Dr. Geddings sailed for Liverpool, en route to Venice, on February 13, 1897.

Book Reviews.

MINOR SURGERY AND BANDAGING. By Henry R. Wharton, M. D., Demonstrator of Surgery in the University of Pennsylvania. New (3d) edition. In one 12mo. volume of 594 pages, with 475 engravings, many being photographic. Cloth, \$3.00. Philadelphia: Lea Brothers & Co. 1896.

This practical little work, which has reached its third edition in a few years, is written in a way to commend itself to the profession. Not only have many additions with a careful revision been made, but the operation parts have been much enlarged. All the descriptions and directions are brief but clear. One of the greatest helps is the illustrations, which are 475 in number in a book of not 600 pages, with every operation and procedure clearly illustrated. The book is to be recommended.

The Bulletin of the Pasteur Institute is the new name for the *Therapeutic Review*, edited by Dr. Paul Gibier and published by the Pasteur Institute. This number contains several articles, specially one on a "Proposed Hospital for Physicians Affected with Tuberculosis of the Lungs." In the report on the patients treated at the Institute in 1896, Dr. Gibier, in speaking of the fatal cases from Baltimore, says that "not one of the above recorded deaths can be accounted as a failure of the Pasteur treatment, inasmuch as the symptoms of the disease made their appearance less than fifteen days after the patients had left the institute."

MESSRS. J. B. LIPPINCOTT COMPANY announces a second edition of a Clinical Gynecology in one volume by the late Dr. John M. Keating and Dr. Henry C. Coxe. Price \$6, \$7 and \$8, according to binding, with about 1000 pages. Among the chapters is one on Genital Tuberculosis, by Dr. John Whitridge Williams of Baltimore, and one on Methods and Preparations for Operations; General Operative Technique, by Dr. Hunter Robb of Cleveland.

REPRINTS, ETC., RECEIVED.

An Improved Surgical Bed. By August Schachner, M. D., Louisville. Reprint from *Annals of Surgery*.

Gonorrhea; Its Ravages and Its Prophylaxis. By Albert A. Burr, Ph.B., M. D., Chicago. Reprint from the *Chicago Medical Recorder*.

Current Editorial Comment.

ENDORSEMENTS

Kansas City Medical Record.

ENDORSEMENTS of the medical profession regarding the efficacy of drugs, mineral waters and kindred remedies have become disgustingly epidemic, the less the value the greater the need of support, and it is obtained without regard to the actual value as a therapeutic agent. Physicians should be exceedingly cautious in these matters and favor no remedy that by long trial has not given good satisfaction in practice.

TEACHING AND EXAMINING.

The Lancet.

WE have again and again raised a protest against the present system of teaching and examining as being responsible for the marked decline in the amount of time given by the medical student in late years to the practical work of the professional curriculum. The period of study has been lengthened, but we see no evidence of an increased attention to those practical subjects which form the bedrock on which his subsequent daily work must be founded. Scientific subjects are allowed to increase daily and to encroach more and more on the time which should be spent in the dissecting-room, the laboratories, and the wards and out-patient rooms of the hospital.

CAUSES OF DEATH.

Medical Examiner.

THE facility and accuracy with which physicians who are called in cases of sudden death diagnose the cause of death is a source of wonderment to the suffering public. The worst of it is that everything goes when the doctor hath said it. There are three causes of death which are seldom questioned; heart disease, apoplexy, and when the doctor wishes to be particularly learned, heart failure. It is seldom that a person dies who does not have heart failure. The question is, could the heart do anything else than fail if the party died? The fact is that without an autopsy, and in some cases a chemical analysis, it is next to impossible to state with accuracy the cause of sudden death. Often the snap judgment on the part of the physician is a bit of professional presumption. A decision of this kind should never be made without a deliberate investigation or consideration, and after a post-mortem if necessary.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERBUCK, M. D., President. H. O. REIK, M. D., Secretary.
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- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SEE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
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WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSBY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
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- WASHINGTON OBSTETRICAL AND GYNCOLOGICAL SOCIETY**. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

It is announced that about March 10, Warner's Pocket Medical Dictionary will be ready for distribution. It will contain 300 pages, size $6\frac{1}{2} \times 4$. The cost to physicians will probably be seventy-five cents a copy. The work will comprise about 10,000 definitions, and will be especially adapted to the use of students and busy practitioners. The publishers are the well-known pharmaceutical chemists, William R. Warner & Co., of Philadelphia.

JNO. C. LEVIS, M. D., West Bridgewater, Pa., says: I have used Celerina in my own case for insomnia. Among all the hypnotic preparations and nerve tonics, it stands justly preëminent. Several persons are now using it and report that no preparation has given such permanent and prompt relief. In a general practice of more than half a century, this is perhaps the first public testimony I have offered. Celerina is the very best nerve tonic now offered to the profession and can not be too highly recommended. To those wanting a nerve stimulant it will be just the remedy.

PRIZE OFFERS TO PHYSICIANS.—Messrs. A. G. Spalding & Bros. are advertising extensively in the medical publications the Christy Anatomical Saddle. The Christy is the pioneer in the anatomical saddle line, and Messrs. Spalding firmly believe they have without question the best bicycle saddle on the market. In order to get from the medical profession their ideas on the Christy Saddle, they make the following offer: They would like to receive from physicians an advertisement setting forth the good points of the Christy Saddle, showing the pelvis bones on the two saddles as used in all Spalding advertisements, and not to occupy a space of more than a half a page, magazine size; the competition to close April 15. First prize, \$50 in cash; second prize, \$25 in cash; third prize, \$10 in cash. For every individual advertisement accepted and used one Christy Saddle will be sent to the physician submitting the same. All communications and copies of advertisements submitted must be sent to the American Sports Advertising Agency at 241 Broadway, New York City, and at the sender's risk. Under no circumstances will advertisements be returned.

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Original Articles.

A FEW FACTS THAT EMPHASIZE THE IMPORTANCE OF MEDICAL INSPECTION OF SCHOOLS FOR THE PREVENTION OF DIPHTHERIA.

By Delano Ames, A. B., M. D.,

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Pathologist and Visiting Physician to the Maryland General Hospital; Pathologist to the
Union Protestant Infirmary; and Health Officer for Ocean City, Md.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

THE subject allotted to me for presentation this evening is one with which I feel sure you are all more or less familiar and concerning which each one has probably already formed his own opinion. I must therefore ask your indulgence if, in the following discussion, I refer to facts that have already been stated, and go over again the fundamental principles in a somewhat elementary manner, calling your attention to work on the prevention of disease in general before taking up the more special subject before us of the sanitary inspection of schools, with reference to the prevention of diphtheria.

While there are certain broad principles and general rules applicable to the sanitary control of all infectious diseases, of which every physician is supposed to be thoroughly cognizant, there are a few special points which relate to each disease in particular, and it is to these as they relate to the hygienic management of this most dreaded disease of childhood and early adult life, diphtheria, that I wish to particularly call your attention this evening. A knowledge of these facts should not be the possession of the physician alone, but should

be shared by those who daily come in contact with children in the class room.

It is hardly necessary to refer to the prime importance of a thorough knowledge of the etiology of diphtheria, of its modes of dissemination and of the circumstances which tend to favor or to hinder its transmission. These facts should be well understood, especially by those upon whom rests the responsibility of looking after the health of the school children of any community, and the demonstrations and remarks already made have dealt with this important side of the subject.

The mass of recent work in the field of experimental and preventive medicine has been rewarded by results beyond the expectation of the most sanguine and it is only necessary to point to the changes that have been brought about in the case of such diseases as typhoid fever, diphtheria, cholera, tetanus and others of the same general nature, and to note the further fact that in many the direct result has been, as is particularly well illustrated by diphtheria, a decided reduction of the death rate, to realize that we are on the threshold of an era in the history of medicine which

holds out promises of being glorious in its achievements beyond the conception of the human mind. So marvelous has already been the foreshadowing of its possibilities that one naturally hesitates before venturing to prophesy the condition of affairs which will confront us at the full noon-tide of this day.

At the foundation of all the advancement already made there rests one great fundamental principle, and it is to the promulgation of the doctrine that it embodies that we owe our present progress and by its still further enforcement we may with perfect reason hope to achieve much greater results. I refer to the doctrine that the majority of contagious and infectious diseases that we have to deal with today have their origin in filth and that when we come to that happy condition when dirt and pollution shall be things of the past we will no longer feel the necessity of combating diseases whose origin lies in unsanitary conditions.

If time permitted I should like to briefly sketch the history of a few of those diseases with which we are most familiar, and show you how it has been definitely proven that they arose from masses of accumulated human refuse material at a time when cleanliness was largely at a discount. The history of such epidemics as the Great Plague of London, or the Black Death, the various visitations of cholera, or the more recent Bubonic Plague, which is responsible for thousands upon thousands of human lives, forms a chapter which points a moral that none should fail to heed.

While we have learned much concerning the nature of the different bacterial diseases, the life history of the various pathogenic micro-organisms, the nature of their toxins and of the antitoxic substances with which their progress is combated, at the foundation of it all rests the important fact that many of the diseases in question, now known to be due to micro-organisms, and about which we are daily learning so many and such important facts, have their origin in human refuse, are in reality the direct outcome of habits of carelessness and uncleanness; which

fact having been thoroughly established, leaves but one conclusion to be drawn, namely, that in order to live in freedom from these diseases we must live under better sanitary conditions. Following the hint thus given it has been found that where cleanliness has taken the place of filth, disease has steadily diminished. The term cleanliness is of course here used in its broadest sense, meaning both the cleanliness of the person, of the habitation, clothing, air, food, drink, and, in fact, of all our surroundings.

One by one diseases have been shown to be due to micro-organisms that have found their way into the economy either through the alimentary tract, the respiratory tract, or through the ruptured surface covering of the body. The specific organisms of the various diseases have been proven to exist either in the air we breathe, or in the food, or drink of which we partake, and it has further been demonstrated beyond a peradventure, that these find their way into these necessities of life, air, food, drink, etc., because of careless habits. Take, for example, either the case of typhoid fever, or of tuberculosis. In the former, water supplies are contaminated by human refuse material, as has been clearly proven over and over again, and being taken into the system leads to the development, in a certain number of cases, of that disease which the specific micro-organism is capable of producing. In the case of tuberculosis the air we breathe becomes contaminated again by human carelessness and habits which, to say the least, are disgusting. Sputum-laden air breathed by healthy individuals results in a certain proportion of cases in pulmonary tuberculosis.

The lesson which the demonstration of these facts teaches, if taken to heart, will in the end lead to the reduction in the number of cases of typhoid fever and tuberculosis to the minimum. In fact, the knowledge of the filth origin of communicable diseases has already led to a reduction in the number of cases of many of them and to a consequent decrease in the number of deaths from the same and this good result is in very large measure

attributable to the faithful work of municipal boards of health in promulgating the doctrine of the filth origin of disease and in attempting to better the sanitary conditions of large and small communities.

Willoughby¹ states in an article written for the *American Journal of the Medical Sciences* same time ago, that the falling off of infectious diseases in England in the past few years has been directly attributable to a general improved condition as regards water supplies, sewerage, drainage, ventilation and the like, which has been brought about by the enactment and enforcement of municipal regulations bearing upon these subjects and that such diseases as typhoid fever, diarrhea and dysentery, phthisis, scarlet fever and the like, have shown a distinct diminution. In the same article he also mentions the fact that diphtheria does not seem to have shared with the others in this decrease, but that it has either seemed to stand still, or to have increased somewhat.

In attempting to explain this fact he notes that although there were statutes to prevent the spread of the disease, its continuance was probably to be attributed to the massing of children in the public, parochial and private schools.

Following this idea, Mr. S. T. Murphy, Health Officer to the London County Council, instituted a series of investigations to determine whether or not the number of cases of diphtheria reported fell off during the period of vacation, in children between the ages of 5 to 15 in a larger proportion than it did in children under and over this age, this being considered the age at which the greatest number of children attended school, and conversely, to see whether, after the reassembling of the children for another school term, the proportion of reported cases in this age-period increased in a larger proportion than did the others. The results that he obtained are of considerable interest as they demonstrate conclusively the fact that the school plays an important part in the propagation of this justly dreaded disease.

Murphy collected all the cases re-

ported to the Health Office and divided them into three classes, the first including all children under the age of five, the second all between five and fifteen, and the third all over the age of fifteen. He then further tabulated these according to whether they were reported in one of the following periods:

Period I. Four weeks of the school term preceding vacation.

Period II. Four weeks of vacation beginning a week after the schools closed.

Period III. Four weeks, beginning one week after the reassembling of the children for the second term.

I append the tables herewith.

Percentage of the number of cases in Period II, in relation to that of Period I.	(UNDER 5)	(5 TO 15)	(OVER 15)
	+20	(1892) -3	-10
	-8	(1893) -27	+1
Percentage of the number of cases in Period III, in relation to that of Period II.	(UNDER 5)	(5 TO 15)	(OVER 15)
	-7	(1892) +29	+34
	+6	(1893) +81	+33

While the results for 1893 were sufficient to indicate the accuracy of Dr. Willoughby's conclusions, those of 1893 were much more conclusive.

The result of these statistics showed, as appears from the tables, that during the second or middle period, when the children were scattered for their vacation, the number of cases of diphtheria reported to the health authorities fell off considerably, and in a much larger proportion between the ages of five to fifteen than either for younger or older children and that during the third period, or after the schools had reconvened, the proportion of cases reported between these ages increased out of proportion to the increase in the other age periods.

The part played, therefore, by the school in the propagation of diphtheria seems to be fairly well established by these studies, and though I know of no similar piece of work in this country, (time has not permitted me to make a

careful search for the same), I do not doubt but that Dr. Willoughby's results could be confirmed here.

Such being the facts in the case, it becomes of grave importance for those upon whom rests the responsibility of watching over the health of the community to institute such reforms as will tend to reduce the danger from this source to the minimum.

That the importance of this subject has been fully realized by certain of our large boards of health is evidenced by the fact that they have recently taken up the matter and are endeavoring to institute such rigid sanitary supervision of schools as has yielded most valuable results in Paris, London, Boston and some other large cities. Within a very recent date the sum of \$45,000 has been appropriated for the Board of Health of New York City with which to institute a more thorough sanitary oversight of the public, private and parochial schools of that city, not only with reference to the checking of the spread of diphtheria, but of all contagious diseases. It is proposed to appoint a number of sanitary inspectors who, I believe, are to be physicians familiar with the clinical history of contagious diseases and with diseases of the eye. To each one of these inspectors a single school will be allotted and it will be his duty to visit the same every day, inspect the general sanitary conditions, as regards ventilation, sunlight, sewerage, etc., and to receive from the teacher a list of the absentees, and of children apparently not well. It shall further be his duty to investigate every case that in any way appears suspicious, and to report the same to the chief sanitary inspector. Upon the certificate of this visiting physician only, a child away from school because of contagious disease either in his own person, or in that of some member of his family, can be readmitted. Each inspector is therefore personally responsible for the condition of the school under his care. It is hoped by this method and by enforcing all such sanitary measures as are possible to further reduce the death rate from contagious diseases five per cent.

With respect to certain specific recommendations, Dr. Henry Dwight Chapin makes the following among others:

1. That the air space in schools per scholar shall be greater than it now is, for it is found that in many schools the cubic feet of air per scholar is below that required by law for tenement house occupants.

2. That the arrangement of the ward-robes, which he now considers a source of danger, shall be made more sanitary.

3. That the use of the slate with its accompanying slate pencil and sponge be abolished. That pencils and pen holders be not transferred without disinfection.

4. That all articles belonging to children attacked with any contagious disease be destroyed.

5. That books taken home be covered once a month at least with heavy brown paper.

6. That the common drinking cup be abolished and that a pitcher of pure water be supplied, which shall be filled at least twice a day.

7. That the banisters and other articles of furniture be frequently cleaned with some antiseptic preparation.

To these it seems to me that certain other recommendations, especially referred to ventilation, the admission of sunlight and the cleaning of the floors, walls, etc., might with benefit be added.

To return again to the subject of diphtheria, there are certain facts that are of the highest interest to us as physicians and health officers, and of the greatest importance as well, with which we should all be familiar.

There has recently been reported an epidemic of diphtheria in a small village near Tarrytown-on-Hudson. In consequence of this the local health board has ordered all schools closed and church services discontinued. The disease is supposed to have been spread by a child who attended school in the early stages of diphtheria, the true nature of the disease not having been recognized.

I have cited this instance as illustrative of the necessity of prohibiting any

child attending school who suffers from any form of throat trouble about which there is the slightest doubt in the mind of the attending physician, until a bacteriological examination by a competent bacteriologist shall have proven the disease to be non-contagious, and to emphasize the necessity of bringing within the easy reach of every physician the means of procuring a bacteriological examination of all cases of suspected throat disease.

In this connection can not be too highly praised the efforts of the boards of health of this and other cities, to establish stations throughout the city where culture tubes can be procured for inoculation, and from which each day the tubes left are collected to be examined and reported on at as early a date as possible, and the further efforts of the board to instruct physicians in the simple technique of culture tube inoculation.

Still another fact in reference to the subject before us is of decisive importance. How soon after a child has recovered from diphtheria is it safe to allow him to mingle with his school-mates? The answer to this question brings out a mass of work leading to very interesting and important results. Sévestre and Médy,² working on this problem, studied the condition of the throat, after recovery, in two series of cases, one of which had been treated with local applications, and the other by the antitoxine method. In the first series in about one-half of the cases it was found that the bacillus disappeared with the disappearance of the membrane, and where they still existed had ceased to be virulent. In the remaining 50 per cent. the bacillus of Löffler continued for some time after the subsidence of the disease. In four cases virulent organisms were found from six to fifteen days after the membrane had disappeared. In two cases cultures from the throats were negative while those from the nose developed virulent organisms. In one case the Löffler bacillus was obtained in virulent condition for forty-nine days after removal of the tracheotomy tube and thirty-eight after the

patient had left the hospital. In the second series there were in all ten cases treated by the antitoxine method. In three cases virulent cultures were obtained for a varying time after recovery, and in one case, twelve days after, a similar result was obtained.

In this connection the facts given by Dr. Welch,³ in an article published in the *American Journal of the Medical Sciences*, are of interest. Referring to the work done by Park upon the length of time that virulent diphtheria bacilli could be obtained from the throats of children cured of the disease, he gives the following figures :

In 752 cases examined the bacillus was found to have disappeared from the throat within three days after complete disappearance of the exudate in 325 cases. In 427 cases the organism lasted a varying length of time as follows :

5 to 7 days in 201 cases ; 12 days in 84 cases ; 15 days in 69 cases ; 21 days in 57 cases ; 28 days in 11 cases ; 33 days in 5 cases ; 63 days in 2 cases. In an extra case reported by Park the organism was obtained in virulent culture forty-nine days after recovery. Park has also reported a series of fourteen cases in which the diphtheria bacillus was recovered in an undiminished intensity of virulence at intervals varying from ten to forty-four days.

While persons well of the disease and in whose throats or nasal passages the organisms still exist in all their vigor are not apparently so liable to spread the disease as those suffering with an acute attack, they may convey it in all its deadliness and that after the lapse of an exceptionally long time, as is illustrated by a case that I will cite in a few moments. The explanation of this fact would seem to be, according to Dr. Welch, in the further fact that the organisms are present in the throats of recovered individuals in much smaller numbers.

A further point of considerable practical importance is the fact, as proven by Park, and by the work of Sévestre and Médy, previously mentioned, that irrigation and mopping of the throat with antiseptic solutions, though it will cause a

disappearance of the organisms in from one-half to two-thirds of the cases in from one to three days, leaves the virulent microbe in the throats of the remaining one-third for from one to three weeks.

As bearing on the subject under discussion from still another point of view, it has been found by Park that the Löffler bacillus can be recovered in a virulent condition from the throats of 50 per cent. of healthy people who have been more or less exposed to the disease. (These figures are from statistics made in the tenement districts. In better localities it is about 10 per cent.) The practical application of this fact is obvious, since in many instances school children attacked with diphtheria have to be housed with unattacked brothers and sisters, likewise school children, who may not contract the disease, and the question will arise at what time may these children who have escaped the disease be readmitted to the school? In all such cases the answer should depend on the results of a carefully conducted bacteriological examination of the throat, made with the same care as though the child had recovered from the disease.

In discussing this problem Park⁴ says: "All members of an infected household should be regarded with suspicion and in those cases where isolation is not enforced the healthy as well as the sick should be prevented from mingling with others until cultures, or sufficient lapse of time, give presumption that they are not carriers of contagion."

As illustrative of the danger that may exist from a person long well of diphtheria I will call your attention to an interesting case reported by Belfonti,⁵ in *Riforma Medica*, for March 23, 1894. A fatal case of diphtheria in a little girl came under his observation. From the throat of the case cultures of the Löffler bacillus and of a streptococcus were obtained. The interest in the case lies in the fact that the infection seems to have been traced to a brother who survived an attack of the disease seven months before. An examination of the brother's throat after the death of the sister showed chronic follicular tonsillitis, with indolent enlargement of the cervi-

cal glands. The exudate from the tonsils showed the presence of the same organisms, recovered from the throat of the case that had proved fatal. An extremely virulent culture of the Löffler bacillus was obtained. Three months later a second examination showed the same thing, but the diphtheria bacillus was much attenuated and gave rise only to slight local inflammation. Immunity in the case of the brother had been obtained by his previous attack.

Before bringing the subject to a close, but one further point of practical importance need be brought out and that is the possibility of the diphtheria bacillus being present in other localities than the throat or nasal passages, and especially outside the body on articles of clothing, books, the hair and the like. Without going into the work that has been done on this subject, it is only necessary to state that articles exposed in the room occupied by a diphtheria patient have been repeatedly subjected to rigid examination with the result that in very many instances the organism has been recovered in undiminished intensity of virulence from such articles as the hair, furniture, books, pictures, etc. The practical bearing of these observations is sufficiently apparent to need no further comment.

Facts such as the ones that I have endeavored to bring out in the foregoing pages emphasize very strongly the importance of the following conclusions:

1. That every case of sore throat in a child attending school should be looked upon as suspicious and treated as contagious until proved to be the contrary either by a bacteriological examination, or by the lapse of sufficient time.

2. That a child attacked with diphtheria should be immediately sent from school and isolated.

3. That the school belongings, books, etc., of the child so attacked should be destroyed.

4. That other children in the same family, or children exposed in any way to the contagion of diphtheria, should be kept from school and from mingling with other children.

5. That after recovery a repeated bac-

teriological examination should be made of the throat and nasal passages and the child not allowed to return to school until the disappearance of the Löffler bacillus is clearly shown.

6. That other children in the same family, or children in any way exposed to the contagion of the disease, should be treated in exactly the same way and not allowed to return to school until the bacteriological examination of the throat is negative.

7. That all the belongings of the sick one, books, etc., that have been exposed in the sick-room should be thoroughly disinfected, or destroyed, and that the child's hair as well as its body should be rendered as nearly germ free as possible before a return to school is permitted.

8. And that finally there should be a sanitary inspector for every school, who should be a physician and who should see to it that the above recommendations are carried out and who further should either be able to make the necessary bacteriological examinations, or have them made by the properly authorized representative of the local board of health.

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5. Belfonti.—*Riforma Medica*, March 23, 1894.
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7. Durgin, S. H.—*Boston Medical and Surgical Journal*, Vol. CXXXIV, 360, 1896.

BACTERIOLOGICAL DEMONSTRATIONS OF DIPHTHERIA.

By Wm. Royal Stokes, M. D.,

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READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

WITHIN the past few years various municipal governments have established well equipped bacteriological laboratories, where physicians may take advantage of the aid afforded by the many modern scientific diagnostic tests.

Among the most useful of these may be mentioned the bacterial test for diphtheria.

It is hardly necessary to remind you that many fibrinous, as well as other, inflammations of the throat and air passages are due to the presence of a specific germ called the diphtheria bacillus.

This bacillus may be easily recognized when present in the inflamed respiratory tract by means of a very simple method. This method is based upon the fact that when the germ of diphtheria is placed upon the slanted surface of coagulated blood serum, within a sterile test tube, a rapid reproduction of the organism takes place, even to the exclusion of other bacteria, if present.

Paper boxes containing a sterile cotton swab and tube of coagulated blood

serum are placed at various points convenient to physicians. In a case of suspected diphtheria, the cotton swab is gently rubbed over the surface of the inflamed portions of the throat and tonsils and this swab, containing the secretions of the throat, is then smeared over the surface of the blood serum. The tubes are then returned to the laboratory and placed in an incubator, maintained at the temperature of the human body (about 35° C.) and are allowed to grow for twelve hours. At the end of this time, if the bacillus of diphtheria be present, it makes its appearance on the surface of the serum as numerous yellow, small, elevated dots, or a more diffuse, homogeneous growth, consisting of many thousands of individual bacteria. These collections are called colonies.

A small portion of one of these colonies is then transferred to a glass slide, and spread over a large area by means of dilution in a drop of water. After drying, the specimen is stained by

means of an aniline stain called Löffler's methylene blue and the slide, containing the bacteria, is then ready for microscopical examination. The bacillus of diphtheria can be easily recognized if present, owing to its characteristic staining properties. This organism will only take up the stain at either end of its body, while all of the other bacteria present will stain throughout their entire extent. The diphtheria germ, therefore, stands out as a light-blue rod with dark club-shaped ends and can always be differentiated from any other bacterium present.

At times, however, in normal throats, there exists a germ called the pseudo-diphtheria bacillus. This differs from the true diphtheria bacillus in possessing pointed ends, in staining regularly and in its failure to kill Guinea pigs after inoculation. After growth for twenty-four hours it may be generally distinguished from the real organism by its failure to produce an acid in a solution of sugar in beef tea. The diphtheria germ causes the production of an acid, which can readily be discovered by simply placing a small drop of the fluid on a piece of blue litmus paper. The latter will of course turn red in the presence of the acid and remain unchanged by the fluid culture of the pseudo-diphtheria bacillus. This organism can usually be easily distinguished from its more dangerous cousin by its regular staining and pointed ends and no further experiments are necessary.

Thus, the physician is enabled to secure an accurate diagnosis twelve hours after his first visit. This is not only useful in regard to the treatment of doubtful cases, but it is also of value in affording a means of isolating cases of diphtheria until the throat is free from germs and all danger of infecting the surrounding community is over.

A number of observers have pointed out the fact that diphtheria is often spread by means of the convalescent. The germs of this disease often remain in the throat for several weeks after all signs of the disease have disappeared. These bacteria are often virulent, even after so long an existence in the healing

tissues, and are capable of causing the death of a Guinea pig. Individuals possessing such dangerous organisms can easily infect other persons either through the practice of kissing, or by means of the various irresponsible acts of children. The practice of transferring candy, slate pencils, etc., from one mouth to another may also introduce diphtheria bacilli from the mouth of a convalescent to that of a healthy child. Diphtheria, therefore, in most cases, must be caused by the actual transference of the bacillus from one throat to another, often by means of some intermediate infected agent. These, and many other possibilities of infection, render it absolutely necessary that several careful bacteriological examinations should end in negative results, before the patient is allowed to mingle with the public.

At times, simple inflamed throats, or even typical attacks of follicular tonsillitis, are due to the diphtheria bacillus and these conditions can only be accurately diagnosed by means of the microscope.

One of the most characteristic results of the presence of the bacillus of diphtheria in the respiratory tract is the formation of a grayish membrane. This may merely be present on the tonsils, or it may involve the entire tract and even cause death by suffocation from narrowing the lumen of the trachea, or wind-pipe.

This membrane consists of fine interlacing threads of a material called fibrin including within its meshes many pus cells and numerous diphtheria bacilli. The latter not only bring about local changes, but they form a powerful poison at this area of local inflammation which is absorbed and carried into the circulation. This poison or toxine is the most frequent cause of death in neglected diphtheria.

Fortunately, in antitoxine we possess a most valuable method of counteracting the effects of this poison and a few words in regard to its manufacture may not be ill-timed.

The production of a toxine or poison by the diphtheria bacillus has been

mentioned. This toxine is secured in a concentrated form by means of the following procedure :

Large flasks of sterile beef tea are inoculated with a pure culture of the diphtheria germ and this fluid is allowed to remain undisturbed for from ten to thirty days. By this time a large deposit has taken place in the fluid consisting of myriads of bacteria. This fluid is then filtered through unglazed porcelain and the clear filtrate is found to contain a very powerful poison in solution, capable of causing the death of Guinea pigs in very small doses. About 0.015 of one cubic centimeter would kill a Guinea pig weighing 300 grammes. Roughly speaking, about 3 cubic centimeters, or 45 drops, would kill a man weighing 70 kilogrammes, or 140 pounds.

This fluid is now injected into the tissues of a healthy horse, beginning with doses as small as 0.5 of one cubic centimeter. This dose is gradually increased until in about 80 days the animal can stand as large a dose as 250 cubic centimeters, or about one-fourth of a quart. The animal is then immune, or incapable of contracting diphtheria, and the blood serum of such an animal is capable of protecting other animals against the poison of diphtheria even after the disease has become established. This blood serum forms the clinical

remedy known as antitoxine and is merely made by withdrawing the blood of the horse from the jugular vein and allowing the serum to separate from the clot. This fluid is then put into small bottles and with the addition of some antiseptic is marketed as a cure for diphtheria. A visit to any laboratory will show that these experiments are performed without causing any greater pain to the horse than that of a needle puncture.

The results of this remedy, as used by hypodermic injection, have been most gratifying and numerous tables can be cited to show the great reduction in the mortality from diphtheria which has followed its use.

The American Pediatric Society has lately published a report upon 3384 cases of diphtheria treated with antitoxine in which the mortality was only 13 per cent. The New York Health Board statistics show a mortality of 17 per cent., while Chicago only gives 6.4 per cent. Welch's tables give a mortality of about 17 per cent. in 7000 cases. These figures, as compared to a mortality of about 50 per cent. previous to the use of antitoxine, are very striking.

Let us close with a quotation from Welch's article. He says: "Antidiphtheritic serum is a specific curative agent for diphtheria and it is the duty of the physician to use it."

TUBERCULOSIS TREATED BY THE SALTS OF THE BLOOD.

STADELMANN has suggested in the *Therapeutic Gazette* that in a certain number of cases of tuberculosis there is a decrease in the normal saline constituents of the body and he therefore suggests that it will be of advantage to give to patients suffering from this disease an increased quantity of saline material. Thus, he recommends that the phosphate of sodium shall be given in the dose of thirty grains three times a day and that subcutaneous injections of six to seven grains of chloride of sodium be used. He asserts that after the treatment there is decrease in expectoration and the objective signs of disease.

SALIVATION A SYMPTOM OF MOLLITIES.

BRAUN (*British Medical Journal*) publishes notes of a multipara who, after being laid up for three months with acute rheumatism, recovered and bore four children. All four pregnancies and labors were normal. Seven years after the fourth, and when apparently in perfect health, she became pregnant again. During the first three months she suffered from profuse salivation. Rapid changes in the pelvis ensued and Porro's operation was necessary; the mother and the child were saved. Braun was struck by the absence of any premonitory symptom besides the ptyalism.

CLINICAL AND BACTERIOLOGICAL DIAGNOSIS OF DIPHTHERIA.

By William H. Welch, M. D.,

Professor of Pathology at the Johns Hopkins University, Baltimore.

REMARKS MADE AT THE CONFERENCE OF HEALTH OFFICERS HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

As I was unable to be present at the morning session, I will take advantage of this opportunity to express my conviction of the great significance of this Conference. It inaugurates an important movement in the interests of public health in this State. By bringing together persons from various professions and walks of life, it will spread an intelligent interest in sanitary matters; it will lead to the education of the general public as to the importance of public hygiene and it should secure co-operation on the part of the great body of physicians with the efforts of municipal and State Boards of Health. There should result an educated public sentiment to support well-directed efforts of the officers of public health, to demand new sanitary legislation when needed and adequate means to carry out sanitary regulations and to aid in the solution of sanitary problems. The success of this first conference will, I trust, lead to a permanent organization with similar purposes and widened scope, an organization capable of being of material assistance to the various Boards of Health throughout this State.

To turn to the theme which has been assigned to me on this occasion, I must express a certain feeling of hesitation in talking before a mixed audience about the harmful bacteria. A half knowledge concerning the living germs of disease is calculated to give rise to exaggerated and alarming apprehensions which a fuller knowledge of the subject would correct. The general public entertains sentiments of great animosity toward all those members of the vegetable kingdom which are called "bacteria." They hear only of those bacteria which cause disease and little or nothing of the vastly greater number of bacterial species which are not at all harmful and many of which, indeed, are of

the utmost service to mankind. The very existence and continuance of life upon this globe are dependent upon the activities of these lowly and much abused organisms. One might, with equal justice, cherish hostile feelings towards all of the higher plants because among them are a few poisonous species. The friendly bacteria have not received their deserts in public estimation. The mere statement that water, or milk, or various substances with which we come into contact, contain so many bacteria is of very little significance. It all depends upon whether harmful bacteria are present and, fortunately, such bacteria are the exception and not the rule. Again, in this preface to what I have to say, I would call to your minds that we are fortunately provided by nature with admirable and manifold means of defence against the invasion and injurious action of even most of the harmful bacteria which we may chance to receive.

Dr. Stokes has already described to you the general characters of the diphtheria bacillus. He has demonstrated how it can be recognized and what use is made of it in the diagnosis of diphtheria, as well as many of the practical applications of this discovery. There is no longer any doubt in the minds of those who are fully informed upon the subject that the Klebs-Löffler or diphtheria bacillus is the sole specific cause of diphtheria. Every inflammation of a mucous membrane or other exposed surface that is caused by this bacillus is diphtheria, and any inflammation that is not caused by this bacillus is not diphtheria. But the mere demonstration that this organism is the cause of diphtheria simply confirms the faith of enlightened physicians that all infectious diseases are caused by micro-organisms. The practitioner of medicine has the right to inquire what practical

results have come from the discovery and to this inquiry it may be replied that there is perhaps no single bacterial discovery which has led to such important practical results as has that of the diphtheria bacillus. This discovery has shed light upon the causation and mode of spread of diphtheria; it has elucidated the real nature of the disease; it has furnished a positive means of recognizing the disease and distinguishing it from other affections, and, above all, it has led to a method of treatment far surpassing in efficacy all other known methods. Those who demand immediate practical results from scientific discoveries ought surely to be satisfied with the outcome in this respect from the discovery of the bacillus of diphtheria.

The old discussion as to whether diphtheria is a local or a general disease has lost all significance in the light of the discovery of the bacillus of diphtheria and the study of its properties. One of the most important attributes of this bacillus is its power to produce a chemical poison of appalling potency. This poison may be compared in a general way and as to some of its properties to the poison secreted by a venomous serpent. In diphtheria the bacillus itself grows only or chiefly at the point of invasion, which is usually the throat, and in its neighborhood, where it leads to inflammation, generally with the formation of a false membrane. Here, growing only superficially in the membrane, the bacilli secrete their terrible poison or toxine, which is absorbed into the circulation and causes the grave constitutional symptoms of the disease and serious damage to remote parts, such as the heart and the kidneys. The local lesion, the false membrane, is caused directly by the bacilli; the general symptoms and distant lesions are the result of the action of the specific poison.

The subject of serum therapy or the treatment of diphtheria by antitoxine does not belong to my theme and I shall only say in this connection that the efficacy of this treatment has passed beyond the experimental stage and is

settled beyond all doubt. Antitoxine, where generally employed, has reduced the fatality from diphtheria at least fifty per cent. Thousands of lives have already been saved by its use and countless thousands will be saved in the future by a discovery resting entirely upon the results of experimentation upon animals.

The diphtheria bacillus affords a positive and practically unfailing means of diagnosis of the disease diphtheria and it is more particularly to this aspect of the subject that I have been requested, in the division of the general theme, to direct your attention. The possibility of this accurate diagnosis signifies much for the practitioner and for the patient.

Before the discovery of the bacillus of diphtheria the disease was diagnosed by certain symptoms and lesions, the most characteristic feature being the presence of a false membrane. This constitutes the clinical diagnosis of diphtheria and it still remains the most available method of diagnosis for the great body of medical practitioners. The bacteriological diagnosis of diphtheria is not to be regarded as intended to supplant the clinical diagnosis or in any sense as antagonistic to the clinical method. It is simply a valuable additional aid in diagnosis, in many cases simply confirmatory of a diagnosis reasonably certain upon purely clinical grounds, and in doubtful cases of decisive importance. For the scientific study of many problems relating to diphtheria bacteriological diagnoses of all cases studied are essential.

The question is of much practical importance whether the diagnosis of diphtheria by bacteriological methods necessitates any material readjustment of the views which had been reached by the anatomical and clinical study of the disease. In my opinion no such readjustment of these views is required as would appear from some of the writings upon this subject. Our experience here in Baltimore has been that over 90 per cent. of the primary pseudo-membranous inflammations of the throat, which the physician upon clinical grounds alone would confidently diagnose as

diphtheria, are in fact genuine diphtheria capable of demonstration as such by the detection of the Klebs-Löffler bacillus. Statements, based upon the examination of large series of suspected cases of diphtheria, to the effect that not more than 60 to 75 per cent. of the cases are genuine bacillar diphtheria, are in a measure misleading and it is not to be understood that all of these suspected cases relate to primary, pseudo-membranous inflammations about the nature of which the practitioner would not be in doubt upon clinical grounds. It sometimes requires repeated, painstaking examination to detect the diphtheria bacilli in diphtheric exudates, although, as a rule, they can be found without much difficulty. So far, then, as these primary pseudo-membranous inflammations of the throat are concerned, no important readjustment of diagnosis is required as the result of bacteriological studies. Not a few, however, of the pseudo-membranous inflammations of the throat secondary to scarlet fever and other acute infections are due to other organisms than the Löffler bacillus and are, therefore, not true diphtheria. The primary membranous croup are nearly all diphtheria.

But it is in the doubtful cases, and more particularly in the milder inflammations of the throat with little or no false membrane, that the bacteriological diagnosis is of prime service. Here the clinical diagnosis alone is generally not decisive. Some have been very reluctant to include these mild cases under diphtheria, but the conception that diphtheria may manifest itself in the form of mild, non-membranous, inflammations was not introduced by the bacteriologists. There were not a few excellent clinicians who advocated this doctrine long before the bacteriological era. One sometimes hears today the statement that bacteriologists demand that every throat harboring the Löffler bacillus should be regarded as affected with diphtheria. Such a view is as ridiculous as to consider the presence of the streptococcus upon the healthy skin as indicative of erysipelas. The bacillus must not only be present but it

must be doing harm by unfolding its pathogenic activities, that is by setting up inflammation. The whole point, however, is that this inflammation may be mild, without membrane, as well as severe, necrotic, with membrane, and the mild, non-membranous inflammations are just as truly diphtheria as are the membranous types. The presence of diphtheria bacilli in healthy throats, which have not recently been the seat of diphtheria or which do not subsequently become diphtheric, is a rare occurrence. The recognition of the mild cases of diphtheria, which can be positively diagnosed only by bacteriological examination, is of no little practical importance, for such mild cases may become severe and they are capable of spreading the disease to others, even in malignant form.

The physician will do well during periods of prevalence of diphtheria to consider all sore throats in children, certainly all in households where undoubted diphtheria exists, as suspicious of diphtheria. The explanation of the relative mildness of the inflammation in some cases of infection with the diphtheria bacillus may sometimes be the weakened virulence of the infecting bacillus, but it is more frequently attributable to more than usual resistance on the part of the individual to this organism.

As the chairman of this meeting has alluded to the prevalent belief that cats may acquire diphtheria and be the means of transmitting it to human beings, I may be permitted to touch upon this point, although it is not strictly relevant to my theme. Noah Webster, in his curious book on "Epidemic and Pestilential Diseases," published at the end of the last century, noted the coincidence of cat distempers with malignant sore throat. More recently Klein has brought together the evidence on this point and thinks that observations which he has made support the popular belief, but his observations do not seem to me convincing. In an address before the Medical and Chirurgical Faculty of this State about five years ago, I referred to this matter and expressed a desire to make bacteriological examina-

tions of cats suspected to have diphtheria or to be agents of conveyance of the disease, but no opportunity for such examination has presented itself. In my judgment there is no conclusive evidence that cats are ever spontaneously infected with the diphtheria bacillus, although they are susceptible to experimental inoculation with it.

It is not to be expected that the practitioner of medicine, as a rule, will himself make bacteriological examinations in cases of suspected diphtheria. Relatively few have either the training or the appliances for such examinations, even if they have the time. Students who are now educated in our best medical schools are taught bacteriological methods and in their future practices should be able to make such examinations as those required for the bacteriological diagnosis of diphtheria. From what has been said, the clinical diagnosis in many cases is sufficiently positive for all practical purposes. The physician should not delay the use of antitoxine in suspected cases of diphtheria in order to await the results of bacteriological examination. There remain, however, a sufficient number of cases where it is of the utmost importance that means should be at the disposal of the physician through which he can secure the advantages of

bacteriological examinations by skilled experts. Nor is it simply for purposes of diagnosis that such examinations may be required.

I would, therefore, in conclusion, emphasize the great value to the medical profession and to the interests of public health of the establishment of well equipped and properly directed bacteriological laboratories in connection with the municipal and State Boards of Health.

A model in this respect is the laboratory of the Health Department of New York City, which has already accomplished results demonstrating the great benefits to the medical profession and the general public of such laboratories. The impulse for the establishment of this laboratory was the cholera scare a few years ago. The fear of Asiatic cholera has been one of the great levers of sanitary reform in this century. Here in Baltimore a bacteriological laboratory has been started in connection with the Health Department. It should receive the hearty support of the medical profession and its capacity for usefulness should be extended by ampler provisions for its support, whereby it may be made more serviceable not only to this city but to the entire State.

TOTAL HYSTERECTOMY AT TERM: CONTRACTED PELVIS.

PINARD and Segond (*British Medical Journal*) treated a pregnant woman who was much deformed. There was scolio-kypnosis and asymmetrical pelvis; the anterior and posterior bony boundaries on the right side almost touched. It was agreed to let pregnancy go on to term and then to remove the uterus. On December 16, 1896, the operation was performed directly pains set in, term having been reached. A very free abdominal incision was made; then the uterus was pulled out and immediately afterwards the upper part of the wound was closed by forceps applied to its edges so as to prevent prolapse of intestine. The elastic ligature was applied and the child extracted; it weighed

eight pounds and was living and strong. Then the placenta was extracted. Pressure forceps were applied to the edges of the wound in the uterus and that organ was then amputated, with its appendages, after the American method—that is, by a continuous incision from left to right. On January 19, the patient was quite well.

* * *

CYCLING, CORPULENCE AND LEANNESS.

CYCLING, says the *Medical Times*, sometimes has the effect of reducing the weight of the fleshy person and increasing that of the thin one. This may be explained by Murchison's observation that leanness, as well as corpulence, is often caused by liver inaction.

Society Reports.

CONFERENCE OF HEALTH OFFICERS OF THE STATE OF MARYLAND.

HALL OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

HELD FEBRUARY 17 AND 18, 1897.

FIRST DAY, WEDNESDAY, FEBRUARY 17.
NIGHT SESSION.

HON. H. M. CLABAUGH, Attorney General of Maryland, opened the evening session with some brief remarks.

Dr. Wm. Royal Stokes of Baltimore then read a paper on "Bacteriological Demonstration of Diphtheria." (See page 389.)

Dr. Wm. H. Welch of Baltimore made some remarks on "Clinical and Bacteriological Diagnosis of Diphtheria." (See page 392.)

Dr. John D. Blake of Baltimore then read a paper entitled "Personal and Domestic Prophylaxis." (See page 369.)

Dr. Delano Ames of Baltimore read a paper entitled "Medical Inspection of Schools for the Prevention of Diphtheria." (See page 384.)

Dr. W. F. Elgin of Bethesda read a paper entitled "Necessary Legislation to Prevent the Spread of Contagious Diseases in Country Districts."

Dr. John S. Fulton, Baltimore, made some remarks on the "Illustrations of the Relation of Schools to Diphtheria and of the Results of Isolation and Disinfection," as follows: I want to undertake the somewhat ungracious task of demonstrating that the schools are the most important link in the chain of causes propagating diphtheria. I want to make a distinction, however, between that part of the programme which you have heard and that you hear from me.

Dr. Stokes has shown you enough bottled poison to destroy this town. You have handled it with impunity. He has told you how to use and what can be done with it. Other gentlemen have told you how to treat the disease, how to purify the clothing and the schools. Do you believe them? I trust

there is not here any representative of that weak generation who seeketh for a sign. They will not hear either Moses nor the Prophets, nor would they hear one who arose from the dead.

Now I have some charts strung along the wall here and I want you to see what sort of a story they tell of diphtheria. This is a chart representing the curve of two diseases of scarlet fever and diphtheria. Every two of these transverse lines mark a period of two months. July and August are the vacation months in this country. These figures (pointing) represent the prevalence of diphtheria in the State of Michigan during the period stated. (Showing charts of other States.) Now I want you to observe that in each of the vacation periods there is invariably a falling line. You will also find in the majority of periods following vacation there is a rising line. Now a general result of the study from a number of States show the same thing. I have added the bi-monthly period together and get this sort of a chart (exhibiting chart). Every vacation curve is a falling line except in the case of Pennsylvania and I will show later why that is so. The bi-monthly period immediately succeeding the vacation period has a rising line. There is no exception to that rule. The vacation period here is represented by the red line in the middle and beginning with the District of Columbia there were for five years 339 deaths, California 1318 deaths, Ohio 8661; St. Louis 2574; Baltimore 4130; Michigan for sixteen years 9380; and Pennsylvania presents the most eccentric curve of all; 4701 deaths in twenty-seven years. This last is unreasonable and that set of statistics is condemned. Michigan presents a typical curve.

This sharply rising line immediately after vacation period, to which all testify alike, and the sharply falling line, except in one State, whose statistics are contradictory, show the part that schools play in the dissemination of the disease. Now compare the curve of diphtheria with that of some other disease. Diphtheria is a cold weather dis-

ease. Pneumonia has a ratio of about 1.06 for each degree of rise or fall of temperature. Given, for instance, the average temperature of Michigan for January or February, make the subtraction and multiply by 1.06 and you get the probable morbidity for March. The composite curve for the two diseases runs almost parallel. There is very slight difference of mortality between the two diseases. They both slay people at about the same rate. The pneumonia curve is two months or more later than the diphtheria curve, the rise not occurring until about December, so that all this space (pointing) of rise in diphtheria after vacation period is, I think, due to the schools.

Correspondence.

CHEST EXPANSION AND PHTHISIS.

Editor MARYLAND MEDICAL JOURNAL.

Dear Sir:—As there is evidence tending to prove the theory that all persons predisposed by heredity to consumption have a respiratory capacity or action insufficient for good; vigorous health, probably a proportionately small chest with insufficiency of lung membrane, that the predisposition is mainly or primarily due to this cause; in other words, that the insufficient respiratory function is the special primary feature of the predisposition (a condition which may be, practically, acquired by habit, occupation, etc.), I desire the coöperation of the profession in an endeavor to help to establish, by means of collective investigations, the correctness, or otherwise, of this theory.

In this behalf I hereby ask all physicians who have patients predisposed to, or in the early stage of, consumption, to send to me on a postal card (will suffice), the information below indicated. As soon as I can study and collate the replies I shall make the results known to the profession.

Give (1) name (or initials); (2) sex; (3) age; (4) occupation; (5) height; (6) weight (average when in usual state of health); (7) circumference of the chest

on a level with sixth costo-sternal articulation when momentarily at rest after an ordinary expiration and also (8) after habitual natural expansion or inspiration (which last (8) usually exceeds the first measurement, expiration (7), by an increase of only about one-fourth of an inch); finally (9), the circumference after a forced expiration and also (10) after a forced inspiration (these two measurements, 9 and 10, varying or showing a range of from $1\frac{1}{2}$ to 4 inches). The patient should of course be as calm as possible and had better, usually, practice the forced breathing for a few acts before these two last measurements, 9 and 10, are taken.

To be of value all four measurements should be taken as carefully, accurately and free from haste as possible.

Any further information, in brief, as to degree of heredity (family history) in cases, prominent symptoms—loss in weight, cough, dulness on percussion, etc., or any remarks, will be a decided advantage.

Measurements of two cases, or several, or the average, could be given on one card.

With the hope that many will comply with the above request and with much respect for and interest in the profession, I am,

Yours truly,

EDWARD PLAYTER, M. D.
Ottawa, Ontario.

Medical Progress.

PERCUSSION OF THE SPINE.—Bechterew (*British Medical Journal*) points out the diagnostic value of percussion of the lower part of the spine. In the sacral region over a triangular area with its base at the upper level of the sacrum and its apex at the tip of the coccyx there is normally a slightly tympanitic note. In cases where there is some morbid change, as in a case where the cauda equina was compressed by a fungoid tumor, the percussion note was definitely altered. Localization of a lesion may thus be facilitated; in the case mentioned the localization was proved post-mortem to be correct.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, MARCH 13, 1897.

THE large number of hospitals and dispensaries in Baltimore has not only been a menace to the practice of the average physician, but has been a drain on the pockets of the tax payer.

The question that is now exciting those most interested in the welfare of Baltimore is how retrenchment can be made with the least injury to the needs of the city and here, among other items on the tax list, the item "city poor" receives attention. The city has heretofore been very liberal in appropriating money to each and every institution without sufficiently inquiring into its ability to render an equivalent in return.

It was reported that one hospital was in such an insanitary condition that it was tacitly agreed by the proper authorities to send no more patients there. Others had at times great trouble in keeping their free beds filled and it has even been hinted in some cases that the city beds were temporarily filled by obliging attendants or patients during a visit of inspection.

For every two dollars paid as taxes to the

city of Baltimore in 1896, 11 cents went to the city poor; therefore this great charity is after all from the pockets of the people, and, for example, a wealthy physician who gives free services to an institution and perhaps a donation as well, and who also pays taxes, directly or indirectly gives to the same institution threefold. If the hospital and dispensary appropriation were more carefully regulated and the results of the work more thoroughly inspected, perhaps the great question of hospital and dispensary abuse would receive a more substantial support.

In the past year the finances of the city of Baltimore have been managed more nearly on a strictly business basis than for many years before and perhaps than ever before. The hospitals and dispensaries usually ask for much more than they want, knowing full well that the appropriations will be scaled down to what they ought to be.

If the reports of most hospitals and dispensaries be examined, the number of cases treated will be seen to be greater each year and this enormous increase is proportionately much greater than the increase of population. The managers of a hospital or dispensary do not care to report a decrease in the number of cases treated and yet this increase cannot go on from year to year without infringing on the rights of private physicians.

If the City Council of Baltimore does cut down the hospital and dispensary appropriations for 1897 it will certainly help to regulate more justly the abuse which has hitherto been so blatant and which persons in all cities are trying to check. While it would be a great hardship to deprive the worthy poor of medical treatment, still any step which would keep those able to pay from sponging on the city and private institutions should be hailed with delight by those unselfishly interested in the practice of medicine in Baltimore.

THE safety with which exploratory incisions can be performed and the freedom from danger involved in antiseptic surgery have brought some diseases formerly considered strictly medical under the surgeon's charge.

Reginald Harrison relates in the *Medical Record* several cases in which an operation for supposed renal calculi had resulted in the

disappearance of an existing albuminuria, and he justly inferred that operative procedures might help some forms of albuminuria. In these cases he found the capsule of the kidney tense, like the surface of a ripe plum.

Accordingly, he made several incisions into the kidney and thus reduced the tension, with the satisfaction of seeing the wound gradually heal with no return of the albuminuria. His cases were all albuminurics but they were not operated on for the relief of that trouble, but for some other diseased condition.

That this form of treatment is right, analogy will show. The eye is a delicate and sensitive organ which may become glaucomatous from intra-ocular tension; the testicle not infrequently becomes inflamed and tense, thus involving the functioning of that organ. In both these organs incision to reduce the tension is the proper treatment which gives the best hopes for a cure. The structural arrangements of the kidney are such that an incision for increased tension would be the most natural operation and it is indicated in a large number of cases.

THE work of the late sanitary conference held in Baltimore last month is shown nowhere so brilliantly as in the *Diphtheria*. papers and discussions devoted to diphtheria and the reports published in this issue are of especial value.

Dr. Stokes, who has charge of the municipal bacteriological laboratory, describes very clearly the methods used in helping physicians to diagnose their uncertain cases of throat trouble and he shows how the health department has left nothing undone to give assistance cheerfully and promptly.

Dr. Welch draws a picture of the clinical and pathological aspects of diphtheria and also speaks of the strides made in the treatment of this disease in a short time and the wonderfully practical results in such a little while from laboratory work.

Dr. Delano Ames sets forth at length the necessity of careful school inspection and shows how easily disease may be spread in schools. The subject of diphtheria will never cease to be instructive and when a treatment reduces the mortality from fifty to seventeen per cent. the most skeptical must feel that the study of bacteria has something practical in it after all.

Reforms are made slowly and many obstacles are in the way but the work of what is now the Maryland Public Health Association supported by the State Faculty and the State Board of Health will in a few years show itself in the lowered mortality rate of the State and in a more universal intelligence on the part of the people as to cleanliness and disease prevention. Work begun in this way will not go on of itself and every member should do his part.

THE frequent use of the x rays on the same person has brought to light the fact that a serious skin affection can *x Ray Dermatitis*. and does follow their use when the same surface is exposed rather constantly and with little chance for rest. It is astonishing, considering the short time these ray machines have been in use, how much literature on *x ray dermatitis* has been collected.

Dr. T. C. Gilchrist has reported a case with very exact illustrations in the *Bulletin of the Johns Hopkins Hospital*. He saw the case in a young man who was exhibiting one of these machines at various medical societies and other places. In the first place, there is a peculiar redness or erythema, then a swelling of the derma, and finally a deep discoloration of the skin until it becomes quite dark. Vesiculation and serious eruption may follow renewed use of the machine before the cure is complete.

In Dr. Gilchrist's case there was first hyperemia, then edema but no skin pain. There was a certain amount of throbbing, aching and shooting bone pains. These pains are due to thickening of the bones of the hand. As this dermatitis does not occur to every *x ray* operator, it is not of such frequent occurrence and when it does happen it is found that rest and freedom from work with the machine is of course one of the best methods of treatment.

It is probable that the cathode rays are electrically charged and carry into the skin minute bits of platinum, which may lead to the formation of ulcers which are very intractable. It is very likely that the tingling experienced by some when exposed for a long period to the influence of the x rays is due to the strong electrical effects in the light. The fact that a few are badly affected by the x rays should not deter one from their use.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 6, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		22
Plithisis Pulmonalis.....		30
Measles.....	5	
Whooping Cough.....	2	
Pseudo-membranous Croup and Diphtheria. }	18	7
Mumps.....	4	
Scarlet fever.....	24	2
Varioloid.....		
Varicella.....	2	
Typhoid fever.....	5	

Dr. George Frederick Child, a retired English physician, died recently in Baltimore, aged 86.

Dr. H. K. Pusey, a prominent physician of Gurnellsville, Kentucky, died at his home, aged 69.

The Tri-State Medical Society of Iowa, Illinois and Missouri will meet in St. Louis, April 6, 7 and 8, 1897.

Dr. George J. Preston is just completing his book on "Hysteria and Allied Affections." It will be published by the Blakistons.

New York has less than 400 miles of paved streets, of which 16 miles are swept from three to four times a day; over 200 miles twice a day; and the rest once a day. This costs \$3,000,000 a year and it is worth it.

Dr. John N. Mackenzie of Baltimore has been made Corresponding Fellow of the British Laryngological, Rhinological and Otolological Association. Dr. Mackenzie is also a Corresponding Member of the Société Française d' Otologie et de Laryngologie.

The American Pediatric Society will hold its ninth annual meeting at Washington, May 4, 5 and 6, 1897. Among others, Dr. Wm. Osler will read a paper entitled "Adherent Pericardium in Children" and Dr. W. F. Lockwood will report a case of Varicella Gangrenosa.

At the March meeting of the Medico-Legal Society to be held March 17, 1897, in New York, Dr. William Lee Howard of Baltimore will read a paper entitled "Demon Possession—Does it exist in China? A Psychologist's Review of a Theologian's Work."

The Conrad Sanitarium Company of Baltimore, a corporation for hospital and asylum purposes, and particularly for the treatment of mental and nervous diseases, has been incorporated by Drs. J. Heath Dodge of Montgomery County; George H. Rohé of Carroll County; Martin W. Goldsborough and J. Miller Kenyon of Baltimore County and Mr. J. H. Preston of Baltimore City, with a capital stock of \$2500.

The *Medical Century*, as quoted in the *Southern Journal of Homeopathy*, is authority for the statement that the late Enoch Pratt had intended building a new homeopathic hospital in Baltimore on a grand scale to rival the Johns Hopkins Hospital, but to be built on more modern architectural lines. On account, however, of contentions, wrangling and ill-will among the homeopathic physicians, Mr. Pratt abandoned the idea and gave a large sum to the Sheppard Asylum.

The monthly report of the Health Department of Baltimore for February shows the following: Number of inspections made, 635; total number of contagious diseases reported, 218; number of places disinfected, 92; number of meat inspections, 574; number of bakeries inspected, 98; sweat shops inspected, 8. The report also shows that during the month 333 mattresses from incoming ships were destroyed. The vaccine physician reported 2940 calls during the month and 991 vaccinations.

The Hebrew Hospital of Baltimore will undergo a transforming next week. The entire building will be repainted and remodeled. A new steam laundry will be built on the west side of the building, twenty-five feet long by fifty wide and two stories in height. A disinfectant plant will also be erected. A dispensary will be fitted up in the basement of the hospital proper, and equipped with every modern appliance. The top floor will be partitioned off and used for the accommodation of patients. The hospital is at present very much cramped for space. These improvements will cost about \$10,000, and will be completed early in the summer.

Book Reviews.

INDEX-CATALOGUE OF THE LIBRARY OF THE SURGEON GENERAL'S OFFICE, UNITED STATES ARMY. Authors and Subjects. Second series, Vol. I. A—Azzurri. Washington: Government Printing Office. 1896.

This volume contains 6346 authors' titles, representing 6127 volumes and 6327 pamphlets. It also contains 7331 subject-titles of separate books and pamphlets and 30,384 titles of articles of periodicals. In spite of the meager support given by the Government to this division of the War Department, the work is no less thorough. It must be a great satisfaction to the compiler of this enormous work to know that it has no superior in any language in any country.

POST-MORTEM EXAMINATIONS IN MEDICO-LEGAL AND ORDINARY CASES; With special chapters on the Legal Aspect of Post-Mortem and on Certificate of Death. By J. Jackson Clarke, M. B. (Lond.), F. R. C. S., Assistant Surgeon to the Northwest London Hospital, etc. London, New York and Bombay. Langmans, Green & Co. 1896.

The object of this little work, which is a very good repetition of a familiar subject, is to instruct medical men in the legal aspects of post-mortem and on kindred matters connected with medico-legal cases. The author also gives a very simple system of antiseptic precautions. The book is of a convenient size and contains nothing superfluous.

WM. R. WARNER & Co. announce a Pocket Medical Dictionary of Today. Concise and comprehensive. Price 75 cents.

REPRINTS, ETC., RECEIVED.

The Want of College Instruction in Electro-Therapeutics. By Robert Newman, M. D. Reprint from the *Electrical Journal*.

The Antitoxine Treatment of Diphtheria. By H. Detwiler, M. D. Williamsport, Pa. Reprint from the *Therapeutic Gazette*.

Report of the Special Committee of the Medical Association of the District of Columbia on the "Hospital and Dispensary Abuse in the City of Washington."

Notes on Some of the Newer Remedies used in Diseases of the Skin. By L. Duncan Bulkley, A. M., M. D. New York. Reprint from the *Journal of the American Medical Association*.

Current Editorial Comment.

SUICIDE.

Medical and Surgical Reporter.

In our own opinion, the ethics of suicide depends wholly on religious belief. If we considered the human being simply a body moved in various ways by the secretion or chemical activity of certain nervous cells, we should consider the stoppage of this secretion or chemical activity as perfectly justifiable, even if other bodies similarly actuated by material processes would manifest peculiar phenomena which the uninstructed call grief, at the cessation of the cerebral secretion in others.

ABORTION MONGERS.

Southern California Practitioner.

SHOULD a man or an agency advertise that for a consideration he or it was willing to assassinate anybody who might be antagonistic to his or its patrons, in all probability the law would speedily interfere and put an end to such premium on murder and would probably provide the advertiser with board, lodging and employment for a term of years, yet the law looks on with a tolerable and tolerating indifference at the disgusting and criminal advertisements offering to restore female irregularities, a term which in plain terms means nothing but criminal abortion, and unfortunately too many papers can be found willing for the revenue thereby produced to print and publish such notices.

BOOK REVIEWS.

The Journal.

A DIFFICULTY from the editorial standpoint is the necessity of committing volumes consigned to the large journals for review to other hands. Although editorially responsible for the review columns of his journal, for many obvious reasons the editor can not personally inspect the books sent to him. Generally the volume is presented to the reviewer, and when a severely critical or objectionable review is returned the editor is often compelled to expurgate or publish in full the passages in question without being able to consult a duplicate. This is manifestly unfair to both author and reader and is an injustice to the honest labor of the reviewer. It would be better for all concerned if the publishers would adopt the French custom of sending two copies of the volumes for review, one copy to be used for critical inspection and one for editorial reference.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION**, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY**. Meets 2d and 4th Wednesdays, 8 P. M.
- CLINICAL SOCIETY**, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE**, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. J. B. SCHWATKA, M. D., President. S. T. ROEDER, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB**. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB**. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY**. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB**. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE**. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY**. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY**. Meets at members' houses, 1st and 3d Tuesdays in each month. HENRY B. DEALE, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. H. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA**. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA**. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. HUSEY, M. D., President. S. S. ADAMS, M. D., Recording Secretary.
- WOMAN'S CLINIC**. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. Mrs. M. H. ANDERSON, 1st Vice-President. Mrs. MARY F. CASE, Secretary.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY**. Meets 1st Monday in each month. N. P. BARNES, M. D., President. W. F. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY**. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

WE desire to caution the profession against the cheap imitations of Phillips' Phospho-Muriate of Quinine, Comp. This compound was formulated and introduced many years since by The Chas. H. Phillips Chemical Co., New York, and because of its reputation for efficiency and thorough reliability, other manufacturers, calling themselves reputable, are soliciting the retailers to purchase cheap imitations for substitution on prescription, which is criminal. These substitutes are wholly unreliable—sell because cheap, and when put out in ignorance of physician and patient, create unjust prejudice against the genuine. The sale of these piratical goods can be checked if the physician will distinctly specify "Phillips'" when prescribing, and see that the patient gets it. The Phillips' Phospho-Muriate of Quinine, Comp., will not disappoint where an easily appropriated general tonic is desired, and has proven itself one of the most thoroughly reliable alterato-constructives to be had.

STRAINING AT A GNAT AND SWALLOWING A CAMEL.—A novel announcement made in our last issue calls an interesting point to mind. It reads "Mercauro is not made in Germany." This statement gives food for reflection. In the last few years the American market has been flooded with the products of foreign laboratories. Their value is not the point now under discussion. They are as distinctly proprietary as any of the many American products. In fact, are more than that, a major proportion being actually patented. We do not call to mind a single one of the best known American products which is patented and yet we realize that American proprietary products are very frequently tabooed by American medical practitioners simply upon supposed ethical grounds. We call to mind the attitude assumed by the editor of a prominent medical journal in this matter. How can such a position be defended? If it be unethical to prescribe an American article which is proprietary, wherein is it ethical to prescribe foreign products which are both proprietary and patented? Where does the medical practitioner stand who discards the American article and prescribes the foreign? Has he a logical defence from an ethical or any other standpoint?

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Original Articles.

A STUDY OF BUBONIC FEVER.

By C. W. Chancellor, M. D.,

United States Consul at Havre, France.

UNDER the control of sanitary science, the Black Death or Plague which almost depopulated London in the fourteenth and seventeenth centuries and Marseilles in the nineteenth century has changed both its character and its name. It is no longer the Black Death nor even the Plague, but "Bubonic Fever." If the memories of that medieval scourge of mankind are growing faint in Europe, the peoples of Asia have during the past half-century been repeatedly subjected to its horrors.

In the spring of 1830 people were dying of it, in the city of Bagdad alone, at the rate of two thousand per day, and in one day, "the twenty-first of April, no fewer than thirty thousand dead bodies were counted of persons who had perished within the town." It appeared on the banks of the Euphrates in 1867 and 1873, in Persian Kurdistan in 1871, in Bagdad in 1877 and in Hong Kong a few years ago, not to speak of its more terrible devastation within the Celestial Empire; and since the outbreak of the pestilence in Bombay, about four months ago, there have been over six thousand cases and not less than five thousand deaths.

The medical history of the plague or bubonic fever in the Western Capital of India will form a memorable episode in the struggle of science with disease. One lesson apparently taught by the out-

break is that the best chance of staying its progress is to strictly segregate the cases; yet the rules drawn up for this purpose could not be enforced owing to the imperious demands of caste. Another lesson is that pestilence is fostered by a condition of filth and that poverty and famine are redoubtable agents for the extension of the epidemic, while the principal sufferers from it are individuals placed in a condition of morbid receptivity by hunger and entire lack of hygiene.

An investigation has been started for the purpose of ascertaining how the plague reached Bombay, but as is customary on such occasions, the result is a long time in forthcoming. As far back as last September the death rate had begun to increase considerably in the quarters of the city, near the docks and port, where a few days before a ship had arrived from China loaded with goods that were no doubt infected. The first cases were represented to be typho-malarial fever, but as the deaths became more numerous, the board of health announced that it was plague they were dealing with. For a whole month, therefore, the epidemic had been spreading without hindrance and the entire city was already contaminated, when, on October 2, the necessary measures were first taken to prevent its diffusion. Then a panic ensued and the population

left Bombay in masses, carrying the germs in every direction; and it now seems probable that the entire province of Bombay will be contaminated, as well as adjacent districts. Without awaiting the result of the investigation as to how the disease reached Bombay, it can be asserted that it developed in British India for two reasons: First, because too much leniency was shown in admitting ships coming from the south of China, which was known to be contaminated; second, because, by not recognizing the disease or concealing its nature, an opportunity was given it to take a firm hold. The plague was known to exist in China and this fact ought to have awakened attention.

It has been a common observation of modern medicine that a great number of epidemic diseases are parasitic—due to the invasion of the body by a minute organism, or bacillus, and that all of them are probably of this nature. The bacillus of plague has been diligently sought by many observers, especially by Japanese physicians during the Chinese epidemic (when one hundred and fifty thousand died in Canton) and a bacillus has been discovered and cultivated. Whether this bacillus be the veritable cause of the malady, or only an incident of blood decomposition, has not yet been certainly established; but there seems to be no question that the effective causes of plague, the conditions necessary to the multiplication of its bacillus and its virulence and infective activity, are filth, putrefaction and over-crowding.

Fortunately for us the bacillus which answers to the disease has little power of resistance. All antiseptics easily get the better of it. At a temperature of 140 degrees, Fahrenheit, it dies, but it retains vitality in the soil, and this cannot be disinfected; hence in Eastern countries epidemics, favored by a dense population and unsanitary conditions, are perpetuated. The best preventive of plague, as of all other zymotic diseases, is generally considered to be cleanliness. If the disease should succeed in crossing the sanitary barriers interposed and enter Europe or America,

it cannot spread and rage as in Asia, and there should be no alarm.

Undoubtedly plague is less serious than cholera. With cholera we never know where we are. Cholera bacilli may get into the water at the mouth of a river, and may travel up it to its source and thus contaminate a whole country, as was the case in 1866 when the disease broke out at New Orleans and successively attacked every town on the Mississippi river as high up as St. Louis. It is an inexplicable fact that the cholera never travels down stream.

But the plague, like the smallpox, is given by contact alone, and thus it can be isolated and "stamped out." We can not only isolate completely the stricken, but we can burn, or disinfect, the infected places and the disease is soon ended. It does not seem probable that the Bombay pestilence is the plague that swept away one hundred thousand victims in London in the fourteenth century, that slew half the inhabitants of Marseilles in 1720, and proved fatal to ninety per cent. of the persons whom it attacked in Vitlanka, but a bubonic fever, swift and terrible, yet amenable to the resources of modern science.

In medieval Europe the pestilence selected its victims so largely from the indigent and ill-fed classes that it got the name of the "poor's plague." It still retains this character in Asia and the Bombay death lists of the past few months place the results in a striking light. The outbreak first occurred in one of the most squalid quarters of the town and with certain exceptions it has spread to the better-to-do-classes.

Englishmen, whether through a transmitted immunity which they have shared with the nations of Europe since 1841, or from a higher standard of living, or from whatever cause, have enjoyed a freedom from attack so remarkable as to render isolated cases among them quite phenomenal. While the mortality from all causes ran up to seventy-five per thousand in the third week of November, 1896, the general death rate among the well fed natives was under thirty, and among the amply fed Eu-

ropean community only eighteen per thousand.

These returns give a wholly different aspect to the plague from that which it bore in the European cities of the middle ages and bears at this day to the people of Asia. It is no longer a "mysterious visitation of Providence" beyond the control of man, but an indirect product of filth and bad food, commencing among the classes least able to resist the virus and scarcely touching those whose higher standards of life and of generous diet enable them to defy it. The correlation of the plague with poverty opens up serious possibilities during the present scarcity in India. For several months the pestilence was kept pretty well under in Bombay, but it has now spread to other cities, the outbreaks being traced to infection brought from Bombay and the spread to a deficiency of proper nourishment.

The wholesale migration of the inhabitants of Bombay into other towns and countries is a serious aspect of the case. Reuter's Bombay correspondent has telegraphed that "half the population has fled the city," which, if correct, means that three hundred and fifty thousand people, most of them poverty stricken, are already on the drift from the plague center in Western India. The ordinary incubation period of plague being from five to ten days, this period would, of course, afford ample time for traveling to a considerable distance from the place where the malady had been contracted, and it is impossible to ignore the dangers which may arise from an unchecked exodus of infected people.

These dangers, are not so great as would at first sight appear, because the activity of the plague poison seems to be greatly dependent upon the environment of the population into which it is introduced, and a camp of fugitives would require time before the inhabitants could surround themselves with anything at all resembling the accumulation of filth which exist in the native quarters of all great Indian cities, and which are retained there by the resistance, active or passive, of certain

classes of the population to everything in the shape of sanitary improvement.

A deep and special interest attaches to the efforts being made to keep the plague out of Calcutta, where smallpox is now raging in a most violent form. The situation and sanitary conditions of Calcutta at this time would render the pestilence in that city more formidable than in either Karachi or Bombay. The Calcutta population is crowded together in masses of whose density we can scarcely form an idea. While the population of London amounts to 35,905 persons to the square mile, it is said that there is scarcely one of the eighteen Calcutta wards, outside of the European quarter and the garden suburbs, in which the density is under 50,000 per square mile; in many it approaches to or exceeds 100,000 per square mile; while in one ward human beings are huddled together with a pressure that gives a rate of 144,000 to the square mile.

The over-crowding of individual houses, as described in the report of the Medical Committee of Inspection, is even more terrible. A building which could at the utmost accommodate 50 persons properly is made to hold 250. In smaller huts, without windows, the inmates are jammed together until the breathing space is reduced to one-thirteenth of the number of cubic feet necessary for health, even when aided with appliances for ventilation.

The quarantine precautions which are at this time being taken in France, Italy, Belgium, Austria and Russia are apparently inevitable in the present state of knowledge. Yet we must not forget that accurately recorded experience renders it somewhat doubtful in the minds of many whether the contagion is carried by sea-going ships. The plague killed 9,000 persons in Alexandria in 1835; but the exportation of cotton from the Egyptian government warehouses, hotbeds of the infection, went on, in the absence of precaution of any kind, without communicating the disease at the ports to which the bales were consigned. Eight ships were ascertained to have cases of plague on

board, but we are told that "no case of infection occurred among quarantine officers or other persons at the ports of debarkation."

While, therefore, the Continental

governments will naturally resort to defensive quarantine measures, which they are so ready to adopt against contagion from the East, there is no necessity to exaggerate the danger.

FUNERAL REGULATIONS FOR RURAL DISTRICTS.

By J. R. Hunt, M. D.,

Laurel, Maryland.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

WHO knows the needs of public protection better than the physician? And we as delegates to a Health Conference ought to be well versed in preserving health after hearing the discussions which I see the committee has selected.

I see by the programme that we are to hear all about the diagnosis, cause and prevention of various diseases, but very little to be said about the disposal of the body after you have diagnosed, found the cause, treated and failed to discover any remedy sufficient to prolong life.

Therefore, I shall attempt to deal with Funeral Regulations for Rural Districts. I believe I represent that portion of the State of Maryland wherein some law should be passed for public protection through burials. Situated as we are in a prosperous up-to-date section of Maryland adjacent to this great city and suburban to Washington, both of which have laws that ought to serve as examples, yet, like other more remote parts of the State, it is seemingly a neglected law. No protection, no licensing of undertakers, no restriction as to who shall bury the dead, but simply do-as-you-please method.

Some improvement or adoption of a general funeral law is a necessity whereby the country districts will receive their share and be in keeping with scientific researches of the present day. With increase in population and building up of country towns and villages wherein no laws exist, the needs are greater for protection and at the same time aid in furnishing statistics which are not obtainable today.

We need a law passed by the next legislature compelling undertakers to register, receive a license and to prohibit burials in any part of the State without first obtaining a certificate of death and the cause thereof; also a permit for burial. Such permits to be issued as in large cities by a secretary or some commissioned officer. This to apply to towns and to villages and country districts. Empower the local physician to issue burial permits when the cause of death has been duly ascertained.

The persons issuing permits should keep proper record of deaths, permits issued, and furnish the Secretary of the State Board of Health semi-annually with complete reports and by so doing enable him to publish annually the vital statistics of the State, which have never been published correctly.

Such a law may be opposed as unnecessary, but I have known supposed crime to be covered by the soil and the public none the wiser. Infants have been buried, the cause of death never being ascertained. No post-mortem was held, no physician ever saw the body; no medical service ever secured, no permit for burial issued and its death an unsolved mystery. Thus crime has been committed and gone on so that today the country districts are the best places for the perpetration of such acts, where anybody buries the dead and no law exists to prevent them.

The danger of spreading contagious diseases by public funerals has, as far as I have personal knowledge, been limited, not as a result of care or law, but

public fear. I believe our State Secretary has witnessed almost an epidemic as a result of a public funeral, on the Eastern Shore. While I think there is a law governing this, yet it is not within our power to enforce it because the issuing of permits is not generally required.

The railroads throughout the country have surpassed us in protection by not transporting bodies which have died of contagious diseases. Nor will they transport bodies dying from any other cause from State to State without being hermetically sealed.

So the time now comes when we as protectors of public health should step in and urge the licensing of undertakers, and prevent burials without due record being kept, thus restricting them in the freedom they now possess. We may seem to be interfering with the rights

and privileges of others, but since the undertakers prosper by our losses and we are only benefited by them covering up our errors, we should not hesitate to suggest anything beneficial to ourselves and the public generally, for as the guardians of health we are looked to by the public for protection. Even Ex-President Cleveland admits our superior judgment in his address before the Academy of Medicine in New York recently when he said "You have invaded our benighted contentment and led us out into broad fields of scientific discovery."

Believing this to be of paramount importance to country districts, I hope to see the cause pushed along by the profession leading to success which it rightly deserves, whereby the State will be benefited and the public protected.

THE BACTERIOLOGICAL EXAMINATION OF WATER.

By Wm. Royal Stokes, M. D.,

Bacteriologist to the Health Department of Baltimore and Lecturer on Bacteriology in the Baltimore Medical College, Baltimore.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

ANOTHER series of examinations are conducted in municipal laboratories, which are directed towards the study of the city water supply. Inspection of the various water sources is often of great value, for carefully trained inspectors can often discover nuisances directly contaminating a source of supply, and demand their removal. The chemical examination of water also forms a ready method of detecting the presence of organic pollutions, and the products of bacteria.

The bacteriological investigation of water is also of great importance. Drinking waters have at times been found to contain such pathogenic or disease-producing bacteria, as the bacillus of anthrax and typhoid fever; and during epidemics of Asiatic cholera, the germ of this disease has frequently been found in the water supply. These organisms are generally deposited in the water with human intestinal dis-

charges. If, therefore, we are able to obtain an exact knowledge of the bacterial condition of any water, by means of our tests, these tests must of necessity be adopting means by which the supply may be rendered purer.

The bacteriological examination of water consists in three distinct series of examinations.

First. A careful classification of the various microscopic animalculæ and plants present in the microscopic sediment. This is of value in determining the origin of various unpleasant tastes and odors, or surface contamination of deep wells.

Second. The numerical estimation of the number of bacteria present in one cubic centimeter of water.

There is generally a difference between the bacterial contents of deep wells, and surface or river waters. Artesian wells are often free from bacteria, and pure water from ordinary deep wells

should not contain as a rule more than 100 to 200 bacteria to the cubic centimeter. Stagnant or polluted well or spring water often may contain several thousand bacteria in one cubic centimeter.

It would be a difficult matter to establish any arbitrary standard for the bacterial contents of rivers, since the number of germs present is influenced by such varying conditions as the rainfall, temperature, the exposure to light, the depth of the water, its aeration, and the quantity of organic matter and mineral salts which the water contains.

Many large rivers, however, only contain from 500 to 1000 bacteria per cubic centimeter above the site of large towns, while the same water below such places, which has received the waste from factories, sewers, stables and household drains, may be found to contain from 15,000 to as high as 100,000 germs to the cubic centimeter. These are generally harmless to human beings, as most of the water bacteria perish at the temperature of the human body. Averages taken from numerous observations of this character are often useful in determining the probable presence of pollution from one or all of the sources above named.

The method simply consists in adding one cubic centimeter of the water to be examined to a tube of melted sterile gelatine by means of a graduated glass tube, and then pouring the fluid into a sterile Petri dish. The gelatine becomes solid at the room temperature, and in several days the bacteria appear on the surface as small elevated collections called colonies. These can easily be counted by means of the Lofar colony counter. If the colonies are too numerous, the water can be diluted before adding it to the gelatine.

It has been already mentioned that many disease-producing germs find their way into the water from the intestinal deposits of men or animals. The fecal discharges of men and animals constantly contain a germ known as the bacillus coli communis, or colon bacillus. This can always be recognized, if present, by means of a series of simple

tests, which depend upon the fact that this organism causes the fermentation of the various sugars in a characteristic manner, when dissolved in nutrient bouillon.

Theobald Smith has studied this fermentation and gas production in the fermentation tube and has found that water containing the colon bacillus will always carry out the same definite formula, even in the presence of the other fermentative bacteria of water. He finds that about fifty per cent. of gas is formed in the stem of the fermentation tube containing a two per cent. solution of glucose, or grape sugar, after exposure to a temperature of 35° C. for three days. The gas always consists of one part of carbon-dioxide to two parts of hydrogen and the medium always gives an acid reaction. The same may be said of lactose or milk sugar. Saccharose, or cane sugar, is either not fermented at all, or the same proportion and amount of gas forms very slowly, not reaching its maximum quantity for two weeks. Many other bacteria have been similarly tested, but the fermentation formula never resembles that of the colon bacillus.

We are, therefore, in possession of a fairly exact method of detecting the presence of intestinal contamination and although the colon bacillus may occasionally be present in pure drinking water, yet its detection in quantities as small as from 0.1 to 0.5 of one cubic centimeter of water should lead to a careful inspection of the water source. Waters free from such bacteria can always be obtained, and it is certainly more pleasant to use such a fluid than one which may at any time contain bacteria capable of producing disease.

The use of large sand-bed filters has lately been applied to filtering the water supplies of large towns or cities with remarkable success. The water is forced through this filter until a gelatinous deposit has formed on the surface consisting of myriads of bacteria and microscopic plants called algae. This deposit prevents the further egress of bacteria and by means of this method ninety-eight per cent. of all bacteria are

removed from the water. Most of the organic material present is also oxidized by means of the bacteria in the filter, being converted into harmless nitrates.

The efficacy of these filters in preventing disease has been demonstrated in various large cities. Hamburg during an epidemic of Asiatic cholera developed about five thousand cases of this disease, while Altona, just adjoining it and using the same water supply, was practically free from the disease. The water passed through sand filters before reaching the consumer in Altona, while Hamburg used unfiltered water. The latter municipality has since built a very expensive sand filter bed.

Lawrence, Massachusetts, has practically been free from typhoid fever since the erection of its filter beds, whereas, before this time, the city had been visited by many epidemics of this disease.

This simple method, therefore, rids the water which we drink of many harmful bacteria and its more general adoption can not be too strongly urged.

These methods, together with the examination of sputum for tuberculosis, the determination of the potency of various antitoxines, the examination of blood for the typhoid reaction and of milk for abnormal quantities of pus; constitute most of the work at present performed in municipal laboratories.

DEMONSTRATION OF THE PATHOLOGY AND BACTERIOLOGY OF TYPHOID FEVER.

By Louis E. Livingood, M. D.,

Assistant in Pathology, Johns Hopkins Hospital.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

DR. FLEXNER, being unable to attend this session, asked me to present this subject and I hope you will pardon me for appearing so unprepared. These specimens are to show the lesions of typhoid fever and the cause of the disease. Typhoid fever is recognized as a disease which is constantly associated with the presence of the typhoid organism. These organisms have seats of preference and usually these parts of the body are most distinctly diseased. It is especially localized in the intestine and particularly those parts that represent lymph structures. The lymph structures in the intestine, as most of you know, consist of small nodules grouped together in patches known as Peyer's and some single ones scattered about in the same region. Besides this localization we have the other lymph tissue in the body also involved.

First let us consider the lesion in the intestine. The first condition that is noted is the swelling of the lymph nodules of the intestine and increase in the elements of the parts. There is an

increase in the number of cells and this hypertrophy shuts off the blood supply of these glands. This causes an anemia of the parts and destruction of the cells, which after their death are thrown off. They become, as we say, necrotic and are thrown off; leaving in their place a depression more or less deep, sometimes simply taking in the inner layer of the mucosa, sometimes taking in more tissue and sometimes going into the muscular layer and even through that. We can divide this condition very well into stages. First, swelling; second, necrosis on account of anemia; and, thirdly, a sloughing off of these necrosed parts, leaving a distinct ulcer, which may go on to complete perforation, or to the formation of scar tissue, which is formed by the proliferation of cells which finally form a smooth scar. The last stage cannot occur if the ulcer is so deep as to perforate the tissues. If in the course of this perforation we have a large blood vessel involved, or even a small one, with subsequent breaking of its continuity, we then have a hemorrhage.

This may lead to a fatal issue. The fourth condition, therefore, occurs only in those cases that recover.

These specimens represent very clearly the first two stages combined and in these three specimens the last stages are shown. In the first you see the Peyer's patch very much enlarged and swollen and the glands around about it are also in the same condition. Here the patches have become necrotic and part of it still shows the slough on the surface. In the second specimen we have the same thing probably slightly more advanced where we have the necrosis and sloughing of the lymph elements. In the last specimen we have the condition of complete necrosis with ulcer formation. You will notice that the floor of the ulcer is smooth and you can see the striae of the muscle. In the lower ulcer you notice a distinct ulceration. I unfortunately cannot bring the fourth stage, that of cicatrization, before you.

These must be recognized as the definite lesions of typhoid fever and very rarely do we have a typhoid fever without them; in fact, a typhoid fever without them may be doubted; still we have other lesions than these; the lymph glands about the intestines and the lymph tissue throughout the body seem to take on some changes, perhaps on account of the poison circulating in the blood. The spleen becomes very large and soft and almost fluctuating at times. The liver shows no distinct lesions except that of cloudy swelling, although there has been noted proliferation of lymph tissue in the liver. The other organs show no changes.

As to the causation of this disease, while the three postulates of Koch have not been proven, namely, to find the organism, to cultivate it, and, by inoculation to produce the disease, there still seems to be no doubt that this organism is the cause of the disease. The failure of the attempt to produce the disease by feeding the animals, or by injection into the lower bowels, is accounted for by saying that no similar disease is known to exist in the lower animals. This organism was first described by Eberth in

1886, but since that time it has been cultivated in all the laboratories of the world. It consists of a bacillus or rod-shaped microbe, very hard to demonstrate, of a size probably not more than one-fifth that of the red-blood corpuscle, and it stains very deeply and uniformly with all our stains. It is a motile organism, its motility being due to flagella, which by their movements cause the organism to go at a headlong gait. It moves across the field of the microscope, as you will see, with a peculiar tumbling motion.

The ordinary methods of diagnosis have become very much confused. The great group of colon organisms are present in the intestine and resemble the typhoid bacillus to a great extent. Some are motile, they stain intensely, they do not produce spores, they grow on the same culture medium and even in the same way that the typhoid organism does. For instance, on milk the colon bacillus acidifies milk in twenty-four or more hours. The typhoid bacillus may do that, but usually does not. The difficulty in diagnosis is (and that is the point I wish to bring out) that the organism may act contrary to the way we expect and not according to the manner in which it was first spoken of. On potato they both grow alike, though the typhoid is not so abundant. The growth of the typhoid bacillus on gelatine was at first thought to be distinct, but so many organisms grow in the same way that now we will not stop to describe that growth.

There is nothing, then, that we could claim to be distinctive of typhoid fever. This has led to experiments to determine some kind of medium upon which the typhoid bacillus would grow in a specific manner and there are some 365 different mediums upon which it can be recognized. These have all given away, however, to one or two, the most prominent of which is that of Elsner. From the myriads of organisms in the intestines he is able to separate out all except the typhoid and colon by means of potassium iodide, and then by means of a culture on potato, he can distinguish between these two. This is a step in

advance, but that which is driving all others out is that which was originated by Pfeiffer. He found that by inoculating animals you could get immunity and that the blood serum of these animals had a peculiar effect upon the organisms. Blood from a patient who had typhoid fever possessed the same power. If these organisms be treated with this blood they gradually come together in little groups and soon disintegrate in the form of small granules, which he called the agglutination, and the breaking up he called its bactericidal properties. This method was not used until ten years after its discovery. This observation of Pfeiffer was a very valuable one. Since that time Vidal has done some important work in this line, but the method used today is very much modified and was first brought out by Wyatt Johnson of Montreal.

A drop of blood is taken from the ear or finger and sent to the laboratory and all they need is a pure culture of the micro-organism and the microscope. This blood when dry is rubbed up with a little sterile water simply to make it fluid and it does not matter what dilution you use. It is added to one drop of typhoid culture and as a matter of practice we generally use a culture of the bacillus coli communis, as well to control the test. These two cultures are placed drop by drop on different slides. They are both put under

the microscope and the alteration occurs almost immediately, though it varies with different blood. You notice at once a slowing down of the organism and its peculiar grouping. There is some attraction of the organism to the group, for they may wander away, but come back again to be subsequently joined to the group which is closest. With the colon bacillus this does not occur. It has been proven that within four to six days after infection has taken place this reaction will be a good one.

Sometimes you will not get the reaction for from one-half to one hour; usually they take, as a working proposition, one hour as a limit. If it does not occur, then they make another test. Dr. Wyatt Johnson had sent to him in Buffalo a number of blood slides marked with a number which he did not know. He was then asked to make the diagnosis. He examined them and at the end of an hour brought in a diagnosis of typhoid in three cases, which subsequently proved to have had it and no reaction in one, which was later shown to have Bright's disease. This was done at the very first meeting in which he brought his method forward. I will be glad to demonstrate this reaction with this blood which Dr. Fulton has just handed me and also with some which I have brought from the laboratory.

HEMIANOPSIA IN ABSCESS OF THE BRAIN.

AN interesting case is related by Lan- nois and Jaboulay in a recent number of the *Lancet*, in which the prominent symptoms were alexia, agraphia, word-blindness, right-sided hemianopsia and facial paralysis. Ear disease was present and the symptoms pointed to the presence of abscess. No pus was found at first on operating, but three weeks later puncture was again tried and a collection evacuated. Eleven days later the patient died and a large abscess was found in the center of the left occipital lobe and diffuse encephalitis affecting

the central and frontal convolutions of the left hemisphere. There was also a small purulent collection in the third frontal convolution. The points in the case which are of special interest are that pus was not found on the first occasion, a mishap which the writers ascribe to a blocking of the hollow needle with which the puncture was made.

The second point is the presence of hemianopsia and they rightly insist upon the importance of looking for this symptom in all cases of suspected abscess. It is not unfrequently present.

DEMONSTRATION OF THE CHEMICAL EXAMINATION OF DRINKING WATER.

By W. B. D. Penniman, A. M., Ph. D.,

Professor of Chemistry, Baltimore Medical College, Baltimore.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

I FIRST want to make a statement as to what a chemical analysis of water involves. The ordinary idea of it is that it is the same kind of analysis as that done in examining a sample of iron ore in which the test is the same wherever the specimen came from. In the examination of water, however, the circumstances are somewhat different. The chemist takes a very large quantity of water and proceeds to examine for certain substances that are found naturally in water, or are present or produced by chemical means that are not usually present. We find, for example, that urine contains about 5800 parts of chlorine in the million, in the form of common salt. In the case of natural water the amount seldom runs over about 6 parts per million. Our first step, then, is for the estimation of the amount of chlorine in the water and, if we find it exceeds certain limits, we are justified in presuming that the water has been contaminated by some substance containing a large amount of common salt. The next step is the determination of the amount of total solids, which is often a matter of considerable importance. A measured quantity of water is placed in a dish and by heat evaporated to dryness. The amount of mineral matter present is of course of importance in just so far as the substances that make up that mass are of importance. We examine for magnesium sulphate, lime, sodium sulphate, etc.

The most important part, however, of a chemical testing of water for sanitary information is the determination of nitrogenous matter; that is noticed when it is contaminated by animal matter, particularly that of an organic nature. This material, which is introduced into the water, cannot be determined by its taste or odor. A large quantity of the albuminous matter will pass through the ordinary natural filtration without sen-

sible change unless the filter is very thick. The first step then is to boil the water with an agent that decomposes whatever animal matter may be present and converts it into albuminoid-ammonia.

The nitrogenous material generally exists in water as the carbonate. It is treated with alkaline permanganate of potash, and the first change is the formation of free ammonia. The next change is the formation of nitrites and finally the oxidation is complete and it is found in the water in the form of nitrates. The examination then consists in determining the amount and character of residue, the amount of organic matter gotten by evaporation, and we then proceed to study the changes that the organic matter has passed through since being introduced into the water.

Let us take a sample of impure water. This specimen which I prepared contains a small quantity of ammonia, about $\frac{12}{100}$ parts per million. I add a small quantity of Nessler's reagent. In the course of a few minutes you will see that the color of the water has changed entirely. It is now quite yellow and the depth of the color measures the amount of ammonia that was present. We can estimate about one part in 20,000,000. We have here two cylinders and we add to one of them, which is graduated, a mixture containing a known amount of ammonia, the standard being 1500 parts per million. The water has the Nessler reagent added and we then draw off a portion of the darker liquid until we make the colors match and by reading off the figures we can without difficulty detect and estimate the amount up to the limits I have stated.

The next examination is one for nitrites and, if they exist in more than a very small quantity, we condemn the

water entirely, for they indicate that active decomposition is going on. The test is even more delicate than the one I have just shown you. I add the reagent to this water, which contains nitrites, and in the course of a few minutes a red color develops and its depth is measured in the same way as before. It is plain that this process is delicate to the extent of one part in 50,000,000.

Now for the estimation of nitrates. In principle it is done in about the same way. We evaporate a measured portion of water, usually 100 c.c. Add to the residue a mixture of strong sulphuric and carbolic acids and then we add a small quantity of water, and a characteristic color is formed; in this particular case it is yellow. There is one point that I ought to mention; the water I had been using is not a natural water but was prepared for the purpose and is about ten times as strong as that usually found. There is one other test, and that generally used in the so-called popular ways of judging water, and that is the test for chlorine. In the method generally advised you are told to treat the water with silver nitrate and if it becomes pearly, it contains chlorine. That is true, but all water contains some chlorine and it is necessary to estimate the quantity to be of any service to you.

In regard to popular tests; there are quite a number of them but none of them are worth anything. The one by which you test the water with silver nitrate, as I have just said, is useless. Distilled water and properly cleaned

vessels are seldom at your disposal. The best test I know which can be used in the country districts is a modification of any I have ever seen proposed and can be easily applied. The source of contamination is usually a closet, stable or pig-pen, and in these cases the question can be determined frequently by adding about five gallons of coal oil to the suspected place and see if it finds its way into the well. It is not a delicate test, but often it will convince you and your patients of the condition of the well.

Now in regard to filters, and particularly those of the household; they are most of them modifications of the Pasteur filter and consist of a porous vessel through which the water percolates and in that way is purified. They are all very good for a short time but those that cannot be cleaned are bound to be in the end a source of trouble.

The bacteria will find their way through the pores of the filter and unless we can remove a portion of the filter and clean it, the only thing to do is to cleanse it by fire. The back washing does not cleanse a filter sufficiently well to make it safe.

I would like to add one word on a point raised by Dr. Stokes. The chemical examination of water does not show the presence of any specific organism; it is not intended to do that. It does show the fact there has been organic matter present in the water and to some degree the amount of decomposition it has undergone.

GRAVES'S DISEASE TREATED SURGICALLY.

TRICOMI (*British Medical Journal*) reports three cases of Graves's disease in which he removed parts of both lobes of the thyroid with resulting benefit. According to Buschan's figures 98 cases of operation in this disease have been recorded up to now; of these, 26 have not been fully reported with regard to the results, 43 died, 25 improved markedly, 16 were cured. The author's cases were typical, the goiter very prominent,

right lobe larger than left (in one case the median lobe was also developed). Palpitation, exophthalmos, frequent pulse (120 to 130), tremor, etc., were all present. Graefe's symptom was absent. After operation these symptoms disappeared in 2 cases and in the third there was noteworthy improvement. In 2 of the cases the disease had developed after influenza. The author would have recourse to surgical treatment; with confidence, in these cases when all the usual medical resources had failed.

Society Reports.

CONFERENCE OF HEALTH OFFICERS OF THE STATE OF MARYLAND.

HALL OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

HELD FEBRUARY 17 AND 18, 1897.

SECOND DAY, THURSDAY, FEBRUARY 18.
DAY SESSION.

THE meeting was called to order at 11.15 A. M., by Dr. E. M. Schaeffer, who said: The three fundamental notes of success that have been sounded by the speakers are, first, education; second, legislation; and third, execution. We have been presided over by the Chief Executive of the State, by the majesty of the law, and I now have the honor of presenting the representative of education, Dr. Daniel C. Gilman, President of the Johns Hopkins University.

Dr. D. C. Gilman: I esteem it a very great distinction to be asked to preside over the deliberations of such a body that meets to consider the best interests of the State of Maryland. I do not propose to detain you by any long address but if you will allow me two or three words I will merely express in behalf of those who represent the educational institutions, their gratification at being associated with the men who are engaged in applying knowledge to the promotion of health in the State in which our lives are cast. What is life worth without health? Our pursuit of life and knowledge all vanishes in the absence of health. You gentlemen representing the science of medicine, the calling of teachers and the application of law are capable of bringing about a revolution and I thank you for the call to be here and take part in this most hopeful conference. I have seen no meeting in Maryland in the past twenty years more full of hope and promise.

Dr. L. E. Livingood, in the absence of Dr. Simon Flexner, then gave a DEMONSTRATION OF THE PATHOLOGY AND BACTERIOLOGY OF TYPHOID FEVER. (See page 409.)

Dr. Wm. Royal Stokes then gave a DEMONSTRATION OF A BACTERIOLOGICAL EXAMINATION OF WATER. (See page 407.)

Dr. August Stabler, Brighton: How long does this sand filter last—I mean how long is it a perfect filter and how soon has it to be changed?

Dr. Stokes: That is an important question and I should have spoken of it. The sand does not do the filtering but the bacteria soon form a gelatinous deposit on the sand, and, by preventing the further passage of bacteria, they make a true filter. The filter then can be used year in and year out but has to be occasionally cleaned. This cleaning is necessary about every two or three weeks. The gelatinous deposit is scraped away, the water which was turned off into another channel during the cleaning process is allowed to run in again and another deposit forms.

Dr. John Neff, Baltimore: Will Dr. Stokes please tell us the analysis of Baltimore drinking water?

Dr. Stokes: The average for the past six months has been about 300 bacteria to the c.c. This is a remarkably good showing as compared with the 15,000 of Philadelphia. The test has also been applied to the supply as it reaches the consumer, and I think we have made twenty tests for the colon bacillus but have not been able to find it. Some examiner in Philadelphia was able to determine it in twenty out of twenty-five specimens of drinking water.

Dr. James H. McCormick, Gaithersburg: Relative to the making of sand filters for the large cities and towns the question of cleaning is one that, from an economic standpoint, is of the utmost importance. As Dr. Stokes has said, from three to five weeks is the average life of the filter, when it must be cleaned, and it is not only the cost but the lack of use of the water while the new film is forming. There has been a new filter made, composed of sand and slack, that is used inside of a sand filter. Bacterial examination has proved it to be superior to the sand filter, and, by an automatic appliance, the stream may be reversed

and the filter cleaned out in a few hours, when the water is ready to use. From reports that have been received from Germany recently it is proven that they can be built more cheaply, run more economically and at the same time are more satisfactory.

Professor W. B. D. Penniman then gave a DEMONSTRATION OF THE CHEMICAL EXAMINATION OF DRINKING WATER. (See page 412.)

Dr. Thos. B. Owings, Ellicott City, then read a paper entitled SOURCES AND SPREAD OF TYPHOID FEVER IN THE COUNTRY, in which he said that these are first, and most important, contaminated drinking water; next, general uncleanness of the sick-room and premises. A number of striking cases drawn from personal observations were read, showing the origin of the disease in foul human excreta.

Dr. Stauffer: The question just occurred to me in connection with the last case cited as to how the original inoculation occurred in that hog-pen to develop the typhoid bacillus. The hogs had evidently not had the typhoid and I would like to ask whether in dry seasons the germs cannot be transferred from place to place by the winds and thus contaminate the water.

Dr. J. S. Fulton: In reply to the inquiries just made, one of which seems to be whether the bacillus was indeed the typhoid bacillus, I would say that it is not likely that Dr. Stokes found in the water the typhoid bacillus; in fact, it is rather unlikely, but what he did find was the bacillus that is commonly associated with the typhoid in all drinking water and is taken as the standard of the condition of water, and that is the colon bacillus. That bacillus must have come from some animal, not necessarily the human animal. The carrying of the typhoid germ by the wind is possible of course, but not much stress is usually laid upon it because other ways are so much more common and important. The fact that it can be carried so has been conclusively shown, particularly in this country, at the army posts in the west. It has been observed in new camps that had been previously

uninhabited. The water they use was carried long distances, usually in barrels or cisterns. Typhoid fever has usually occurred in these camps from the recruiting of a new soldier or the arrival of some one who has had the fever. The only parties in the camp not subject to the fever were the officers who drank imported mineral waters and the few Chinamen who used tea and whose water, of course, had been boiled.

Dr. W. R. Stokes: In regard to the case that Dr. Owings described, I may say that the typhoid bacillus is a very delicate organism and it is a difficult matter to grow it from the water supply. It is too long a process to adopt in the routine examination of drinking waters, but it can be done. The organism that I found in the water brought me by Dr. Owings was the bacillus coli communis. I found it present in the water and the fact of the intestinal discharges being present in the water enabled us to say that it was typhoid.

Dr. A. K. Bond: I think sometimes typhoid fever may be contracted from cases not recognized as such. In some of its forms in the adult it is so mild that it cannot be easily diagnosed and the patient may not be considered to have typhoid, but, of course, the stools from such a patient will contaminate the water supply. This is particularly noticeable in the disease in children. I have seen cases of typhoid fever, and I had every reason to believe they were such, in which the disease looked more like bronchitis, and I think they would have been taken for such if they had been isolated cases. Perhaps some of us owe our immunity to the fact that we had it in childhood. I recollect, too, that some years ago Dr. Anderson of Rockville, from down in one of the counties, held, in a paper read before the Faculty, that a typhoid fever epidemic had started in his town after certain streets had been torn up and the ground exposed in a peculiar way. He was laughed at at the time, but the statement chimes in with what Dr. Fulton has said in regard to the camps.

Dr. W. J. Todd, Mt. Washington: I have recently had a young child with

typhoid fever in a family at Mt. Washington. The house was situated high and dry, the water supply was obtained from an artesian well and the head of the house took care of the dairy herself. The symptoms were certainly those of typhoid in a small child, and upon questioning the mother closely as to the other members of the household, I discovered that a nurse had left the house and gone to the city sick. Later on I learned that she had typhoid fever and that for two weeks past she had had a diarrhea and that during that period she had entire charge of the child, so I thought I was safe in attributing the affection to this cause. I would like to ask how young a child or at least what is the youngest age at which any one has seen typhoid fever.

A member: I have seen it from one year up to eighty.

Dr. J. McPherson Scott, Hagerstown. This discussion carries with it the fact that the water we drink ought to be as pure as we can get, and we ought to do something practical at this conference.

As to what age typhoid fever can develop or how often it can occur in the same individual should be discussed elsewhere. After the presentation of the facts we have had from these gentlemen this conference ought to make some suggestion as to caring for the water supply of the State and municipalities. This question of water supply to the municipalities is as important as any that can be presented to the people of Maryland. In Massachusetts there is a law forbidding the act of incorporation unless it carries with it an approved supply of water. I therefore offer this resolution:

Resolved, That the Board of Health present to the Legislature the necessity of such legislation as will require individuals or corporations supplying municipalities with drinking water to adopt such methods of filtration or purification of the water supplied as may be approved by the State Board of Health. Carried.

This resolution was suggested by the statements made by Dr. Stokes as to the reduction of bacteria by filtration

and by some other gentleman that there is a filter in use that is as good and cheaper. Now I know how it is in the towns throughout the State. Individual communities may be unable to get such an act, but it can be passed through the State and this conference ought to endeavor to give the people some degree of security as well as to sit here and enjoy these demonstrations. We are here at the expense of the Counties and the people must see coming from this conference some practical results.

Dr. F. H. Thompson, Annapolis: In speaking to the point I think that what we need in this State is a chemical and pathological laboratory to which the people can send specimens for examination. This is one practical thing for which this conference ought to work.

Professor W. B. D. Penniman: In regard to the proposed motion, which is, as I understand it, that such a law be passed that no water can be supplied except it be filtered, I think that is a good law in certain ways, but is not exactly the way in which we care to put it, for this reason: Take the supply of the city of Baltimore; I had it under my charge for some years. It has undergone examinations that run into the hundreds and at no time have we had reason to believe that it required filtration. If we recommend that all water supplies be filtered it seems to me that we are asking too much. Take for instance the water furnished some of the towns in Maryland that comes from artesian wells; that water does not require filtration, so I would offer this amendment; that no town shall be allowed to furnish water unless the same be approved by the State Board of Health, the latter to have the right of prescribing what means of purification should be used.

Dr. T. A. Councell, Easton: I second the amendment of Dr. Penniman's, but I suggest that they be required to have the water submitted for examination once in thirty or sixty days. I would like to ask Dr. Fulton what provision is made for examination of the water supply of wells and at whose expense this examination should be made.

Dr. Fulton: The State Board of Health has to make the chemical examination without cost to anyone except for the purchase of a container. Send to the Board of Health for a blank directing you how to take the sample of water; send that sample to Dr. Penniman, who pays the expressage, and send the blanks back to the State Board of Health, who authorize the examination. As far as the bacteriological examinations are concerned we have at present no money to apply that way. At present such an examination would have to be at the expense of the individual. In regard to the questions asked by Drs. Stabler and Todd; the question of immunity is a very important one and those of you who have had the disease might be tested by the new method. I think the convention would be glad if Dr. Welch would speak upon that subject.

Dr. W. H. Welch: I must believe that there is a very considerable degree of immunity brought about by a preceding attack. There is no question that a single attack affords some protection against further attacks, but of course it is not sure protection. We have no means of determining whether a patient is or is not susceptible to typhoid fever. This blood reaction is probably not a safe index to the presence of immunity and we have no proof at present that the absence of blood serum indicates any particular susceptibility to typhoid fever. This substance which causes the reaction is certainly not identical with the immunizing substances. As regards the other points that have been under discussion since I came I am not sure as to the wording of the original resolution and would like to hear it read.

Professor W. B. D. Penniman then offered the following amendment, which was accepted.

Resolved, That all water supplied to municipalities or sold to the public generally shall be examined at intervals by the State Board of Health and if found impure shall be filtered or otherwise purified and prescribed by the said State Board of Health.

It was moved and seconded that these

with all other resolutions be referred to a committee of five to be appointed by the chair, the committee to report at the executive session. The chair appointed Dr. J. McP. Scott, Prof. W. B. D. Penniman, Mr. Charles Hartshorn, Dr. Wm. H. Welch, Dr. John S. Fulton.

Dr. Wm. H. Welch: It might be a waste of time now to discuss this resolution, but cannot this committee be instructed also to report upon that other matter, the importance of providing for the bacteriological laboratory or the services of a bacteriologist for the use of the State Board of Health? Dr. Fulton has just said that he has no means for making a complete examination of the water. He can only make the chemical examination and it is well known that the examination ought to be complete to be of any value. It involves also, I think, the visit of an expert to the source of supply to see for himself if there is contamination. If he finds that there is contamination, the other examinations are not necessary.

I would suggest that this committee widen its limitations and bring in suggestions providing for funds or some means by which there shall be placed at the disposal of the State Board of Health the services of a bacteriologist.

Dr. J. H. Billingslea, Westminster: I would like to ask whether it is possible for the smaller towns to put in a filtering apparatus.

Dr. W. R. Stokes: There is a small filter in one of the cities of this State and as they are not very rich I presume it came well within their means.

Dr. August Stabler, Brighton: I would like to ask whether, if I have a case of typhoid fever in my neighborhood, I could apply to the State Board of Health to send an inspector there to properly examine the premises and whether there are means provided so to do.

Dr. Fulton: I regret to say you cannot. The only trained inspector in the State Board is the secretary and the Board cannot at present afford to pay even him for that work. It is often not easy to answer all the calls as secretary.

The meeting then adjourned.

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DR. FRANZ PFAFF and Mr. Alfred W. Balch, student of medicine, have recorded in the *Journal of Experimental Medicine* some very practical work done in the Pharmacological Laboratory of the Harvard Medical School showing the results of an experimental investigation of some of the conditions influencing the secretion and composition of bile.

The subject selected was a female patient with a biliary fistula. Before studying the action of some of the supposed cholagogues, the normal flow of bile with the normal variations was studied. For two days the patient was kept in bed and the flow of bile was accurately measured. The ordinary hospital diet was given, with breakfast at seven, dinner at one and supper at six.

In those two days the bile was collected hourly, on the first day the smallest quantity being between seven and eight in the morning and on the next day between twelve and one A. M. The largest quantity fell on the first day between one and two P. M., and on the second day between twelve

and one. The total quantity collected seemed to be rather constant, about fifteen or sixteen ounces. The specific gravity of the samples collected varied from 1008 to 1010, the color was yellowish, a trace of albumen was present, the percentage of solids varied between 1.6 and 1.7 per cent. and the ash between 0.8 and 0.9 per cent. The flow of bile normally varies from hour to hour and even records taken every fifteen minutes show great differences.

To come to the practical part of this investigation, these two observers gave first no medication for three days, then dried human bile for twelve days, no medication for four days, salol for seven days, no medication for two days, corrosive sublimate for seven days, no medication for five days, ox bile for seven days, no medication for five days, calomel for six days, no medication for eighteen days, bile salts for seventeen days and no medication for four days, making a period of ninety-seven days, covering the whole time of dosage. The intervals of no medication were left to lose the effect of each supposed cholagogue and to take observations in the interim. After all these experiments the patient left the hospital with fifteen pounds increase of weight and feeling well with the exception of the biliary fistula.

Reviewing the results of these experiments there was a decided increase in the quantity of bile and at the same time a higher percentage of solids, with human bile, with ox bile and with the mixture of pure bile salts. The result with salol was not decisive, but perhaps there was a slight increased flow with it. Under corrosive sublimate and calomel the flow of bile was, if anything, less than normal. This is against all ideas of the supposed cholagogue effects of calomel. The results obtained with bile or its characteristic salts show an increase in the quantity of bile and a higher percentage of its solids. From their observations these two investigators seem to think that the crude ox bile is the best form in which to give a reliable cholagogue, the salol to be used as coating for these pills to prevent gastric juice action.

In their experiments large doses were used, but in practice a pill of 0.25 gramme (about 4 grains) is of convenient size. Two such pills are given three times a day and it might be well to begin with a small number of pills

and increase the dose according as the condition of the patient demands it. As a cholagogue, crude ox bile is indicated where we wish to cure certain cases of obstinate constipation and increase the absorption of fat.

These experiments are of immense practical value, but they are not yet conclusive until further tested at the bedside and yet the investigators deserve great credit for their painstaking work and such a clear exposition of their methods.

THERE is a new fever of childhood just come to light in country practice, in an epidemic which occurred from 1893 to 1896 about Businessburgh, Ohio. Dr. Korell, in whose practice the ninety-six cases occurred, was apparently either too busy or too modest to report his observations and the whole epidemic with its rare opportunity for clinical study and record would doubtless have been lost to pediatrics had not Dr. West of Bellaire, Ohio, who saw a few of his cases, reported it to the New York Academy of Medicine (*Archives of Pediatrics and Pediatrics* for December, 1896).

His report is of special interest in view of the doubt which has heretofore existed as to whether there is a definite epidemic disease of children corresponding to Pfeiffer's glandular fever. Although several recent standards on pediatrics wholly ignore it and Ashby and Wright think its individuality is not proven, this latest report shows that clinically, at least, glandular fever has a right to recognition as a definite disease.

It is characterized by an incubation of about a week by general debility, considerable fever, intestinal disorder and swelling of the glands along down the neck, first on one side. The mesenteric, axillary and inguinal glands may participate in the swelling. The disease averages two weeks in duration.

There is no evident inflammation of the inside of the mouth, throat, ear or nose. The glands enlarged do not suppurate. They retain distinct outlines and cannot be confounded with the swellings of mumps, which were diagnostically excluded. The swelling in the neck is always tender, often painful, is about as thick as the index finger and runs downwards and forward from just below the angle of the jaw, between the jawbone and the sterno-mastoid muscle to a little beyond

the middle of the jaw; and in the swelling three or four glands could be outlined by the touch. Just as the swelling on one side of the neck is about to subside the other side is apt to become swollen.

There may be stiff neck and disturbance of respiration (which might be fatal), due to the pressure of the swollen glands. No enlargement of the glands remained after convalescence. No death occurred in uncomplicated cases. Treatment did not seem to do any good.

Although clinically an entity, this fever would seem from the records to be a sepsis from the digestive tract. The bowels were either constipated or discharging unwholesome feces. One's thoughts naturally revert to influenza. Was it a form of this protean disease in its abdominal variety? Influenza is quite equal, in one of its freaks, to producing such an epidemic.

Practically, the disease may be taken as a newly-described fever; and until more is known, therapeutics should be directed to a more thorough clearing out of the foul digestive canal than Drs. West and Korell secured.

It is astonishing how long physicians have been contented to use the old-fashioned single and binaural stethoscope without trying to devise some better means of auscultating the internal organs. Ever since the discovery of the transmitter in the telephone attempts have been made to adapt this principle to the stethoscope and it is only in the past year that what is most commonly called the phonendoscope has been used. That it is better than the old stethoscope almost any one will admit, but that it is far from perfect is very evident.

There have been many forms put on the market, all suggested by the original ideas of Bianchi and Bazzi, and they certainly possess many advantages over any other known means of auscultation. They not only allow of auscultation through the clothing, which is at times necessary, but they admit of a much better and clearer mapping out of the internal organs by a sort of auscultatory percussion.

The perfected phonendoscope, which has not yet made its appearance, will probably be a great improvement on anything of the kind which has yet made its appearance.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 13, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		20
Phthisis Pulmonalis.....		23
Measles.....	12	
Whooping Cough.....	1	
Pseudo-membranous Croup and Diphtheria. }	22	3
Mumps.....	7	
Scarlet fever.....	28	1
Varioloid.....		
Varicella.....	1	1
Typhoid fever.....	3	1

Dr. J. E. H. Lewis, Stevensville, Va., died last week, aged sixty-five.

The Missouri State Association will meet in St. Louis, May 18, 19 and 20.

A man in New York was recently arrested and fined five dollars for spitting on the floor of a street car.

The Norwegian Parliament has appointed Dr. Nansen to the chair of Zoölogy in the University of Christiania.

A prominent Chicago lawyer has sued a street railway company for \$50,000, because he was arrested for spitting on the floor.

As a result of the great decrease in the birth rate in Paris, a "repopulation" society has been formed. It is naturally opposed to the Malthusian Society.

The Social Purity League of Topeka, Kansas, is supporting, with some show of success, a bill making the conviction of assaulting women punishable by castration.

According to the Supreme Court of Illinois, no physician is compelled to report contagious disease, or do any other public duty, without special compensation.

Dr. Thomas Owens, a retired naval officer, died in Washington last week, aged sixty-seven. Dr. Owens was born in Baltimore and was graduated from the University of Maryland in 1859.

Dr. J. Chalmers Da Costa has been appointed Clinical Professor of Surgery in the Jefferson Medical College of Philadelphia.

Dr. R. W. Murray, Greenville, Va., has been added to the list of surgeons of the Baltimore and Ohio Railroad Company, vice Dr. J. M. Tate.

Because Kaposi in a lecture in Vienna referred to the connection between pediculi and socialists a mob of the latter (and presumably, too, of the former) collected in front of his house and created an unpleasant disturbance.

Brigadier General George M. Sternberg, Surgeon-General, and Lieut. Colonel David L. Huntington, Deputy Surgeon-General, are detailed to represent the Medical Department of the Army at the Twelfth International Medical Congress to be held in Moscow, Russia, August 19 to 26, 1897.

The New State Board of Health for Virginia consists of the following: Drs. R. W. Martin of Lynchburg; Hugh M. Taylor of Richmond; L. B. Edwards of Richmond; Paul R. Irving of Richmond; J. H. Haff of Harrisonburg; L. E. Harvey of Danville and Mr. Vernon G. Culpeper of Portsmouth.

The Adjunct Faculty of the Baltimore Medical College last week organized a medical society and elected officers as follows: President, Dr. J. M. H. Rowland; vice-president, Dr. W. P. Miller; secretary and treasurer, Dr. C. H. Dixon; executive committee, Dr. C. M. Cook, Dr. W. S. Smith, Dr. E. L. Whitney.

At the last meeting of the State Board of Health it was decided to take charge of the health of Wicomico County at the expense of that county should the Wicomico commissioners persist in their intention to discontinue the local health organization. That county will resent any interference on the part of the State Board.

The Philadelphia *Medical and Surgical Reporter* announces the early completion of a hospital in that city to be devoted to the treatment of diseases of the stomach with a large medical staff, among whom is Dr. Wm. Osler of Baltimore. A correspondent asks why is it necessary to draw on Baltimore for a part of its staff and facetiously suggests the erection of a hospital for the treatment of diseases of bicyclists.

Book Reviews.

TWENTIETH CENTURY PRACTICE. An International Encyclopedia of Modern Medical Science. By Leading Authorities of Europe and America. Edited by Thomas L. Stedman, M.D., New York City. In Twenty Volumes. Volume X. "Diseases of the Nervous System." New York: William Wood & Co. 1897.

As a rule, the different contributors to a system usually take different views as to the scope of the articles they are to write, but perhaps this volume presents fewer objections on this score than usual, because so much of it comes from one pen, 355 of the 843 pages being contributed by Dr. Joseph Collins of New York. This includes cerebral localization, encephalitis, abscess, cerebral palsies, multiple sclerosis, bulbar paralysis, diseases of the meninges and some minor subjects. Nothing but the very highest praise can be given to Dr. Collins' work. The different articles are encyclopedic, as they should be in a work of this kind, and they will stand for many years as the epitome of our knowledge on the subjects treated of. The literary style is delightful and if all articles in works of this kind were treated in the same conscientious, painstaking manner, "systems" of medicine would be more attractive. The other article of note is the excellent one by Dr. Sachs on Tumor of the Brain. Dana's article on Intracranial Hemorrhage, Embolism and Thrombosis, comprising only about 30 pages, is far too meager a sketch for such a volume, as is also his article on Neurasthenia, two pages only being devoted to treatment. The general practitioner, for whom this book is in the main intended, certainly requires far more specific directions in the management of a case of neurasthenia than can be found in the two pages alluded to.

Féré of Paris contributes two articles, one on Hysteria, the other on Epilepsy. The former of the two is rather unsatisfactory and the latter also disappointing.

The section on speech disturbances by Pershing of Denver is clearly written, but rather from a physiological than from a medical point of view. The last article in the book, Disturbances of Sleep, by Sanger Brown, is brief and of no great value.

On the whole, it may be said that the value of this volume lies in Collins' admirable work.

Current Editorial Comment.

THE DIAGNOSIS OF MALARIA.

The Post-Graduate.

DR. OSLER evidently believes that it requires an expert of the highest order to determine positively the existence or the non-existence of the malarial parasite, in the blood, at an early stage of the disease. An ordinary, well-disciplined house surgeon, according to him, is not to be relied on implicitly for diagnosis, but only an observer who has spent years in the necessary microscopic examinations.

THE NEWER REMEDIES.

Dr. L. Duncan Bulkley, New York.

THE science of medicine is a grand and difficult one and we must not be content with ordering this or that remedy, on however high authority, without understanding the diseased condition we have to meet, and the true nature and uses of the remedy we are to prescribe. All thoughtful men must regret the ready and careless way in which some of the newer remedies have been pushed, too often only for the gain of manufacturers or proprietors, and the profession should make a stand against and show their disapproval of the impudent manner in which many of them have been vaunted for commercial purposes.

NURSES.

Boston Medical and Surgical Journal.

FOR the seriously sick and even for invalids or for the weary, who can afford the expense, there is no greater comfort next to a skillful, cheerful, sympathetic doctor, than a good, cheerful, tidy, sympathetic trained nurse, and we are glad to bear testimony to the very valuable services rendered to individuals and to families by very many such in our country. The fees which such nurses command are doubtless too high for many patients of moderate means; but when we take into consideration the arduous nature of the duties, the intervals of rest which a nurse is forced to take in order to keep her health, and the shortness of the active wage-earning period of a nurse's life, they seem none too large. In so many diseases, especially typhoid fever, the nurse is so much more important than the doctor that to her is very often due the credit of a cure. A good nurse is invaluable.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY. Meets at call of President.
- CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. J. B. SCHWATKA, M. D., President. S. T. ROEDER, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M., 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. ARTHUR SNYDER, M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. T. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 2d Monday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M., Georgetown University Law Building. S. C. BUSEY, M. D., President. HENRY L. HAYES, M. D., Recording Secretary.
- WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. EMILY L. SHERWOOD, President; DR. D. S. LAMB, 1st Vice-President. MISS NETTIE L. WHITE, 2nd Vice-President. MRS. MARY F. CASE, Secretary. MISS MINNIE E. HEIBERGER, Treasurer.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY. Meets 1st Monday in each month. N. P. BARNES, M. D., President. F. W. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

PERMIT me to say that I have dispensed from my office many bottles of your Elixir Six Iodides, for the simple reason that my patients were unable to obtain the preparation from the retail druggists, and for the more important reason to prevent substitution or sophistication, which, although not generally practiced, are unfortunately too frequently met with. The druggist's interest being to sell all the drugs he can, for therein lies his bread and butter, while the physician's lies in an entirely different direction and that is—to cure his patients as soon as possible. My experience with the Elixir Six Iodides has been so far a most happy one, and I can only congratulate your firm in placing in the hands of physicians so efficient a preparation. I shall continue to dispense it as long as it maintains the present excellent standard in curative effects. On referring to my case book I find I have of late administered nearly as many as four dozen, which goes to show how frequently the Six Iodides can be found useful. The fact remains patent that I have found in this particular preparation a desideratum which no other combination seems to possess. As a typical case I shall mention one of necrosis of the sternum in a young man, with no history of syphilis, where every other means had failed to arrest the destruction of bone tissue or structure. He had been under treatment at one of our best hospitals in this city and undergone a surgical operation, "scraping the bone," etc., which proved useless. The discharge continued and as a *dernier ressort* he came to me. Three weeks after the institution of Six Iodides, the ugly sinus had completely dried up. Nor has there been any sign of imperfect cure. Patient reports himself as being perfectly well. Since then has married and is the father of a "bouncing boy," free from any taint of disease whatever. Every alternative, so-called, had been tried in vain; I had almost despaired of ever curing the fellow when he was put on the "Elixir," which did the work most thoroughly. Trusting that the medical profession may be induced to give this truly reliable preparation a thorough trial and be convinced of its intrinsic value.—William A. Armstrong, M. D., 1808 Park Avenue, Philadelphia, Pennsylvania.

MARYLAND MEDICAL JOURNAL

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Original Articles.

THE DISGUISES OF TYPHOID FEVER.

By Wm. Osler, M. D.,

Professor of the Principles and Practice of Medicine, Johns Hopkins University.

REPORT OF REMARKS MADE AT THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE,
FEBRUARY 17 AND 18, 1897.

THE older we grow the less we know. That at any rate is what I feel at times when I come up against the blank wall of a case of fever; is it typhoid, malaria or remittent? Now it is often a very difficult matter to make a satisfactory diagnosis early in typhoid fever and the diagnosis is sometimes not made. We have had, I think, out of about 530 cases, with I forget how many deaths, two cases in which the diagnosis was made by Dr. Welch in the pathological laboratory and not made in the wards. There are a great many cases during the year in the country in which the diagnosis is never made correctly *intra vitam*, but only post-mortem. The doctor is lead astray in the diagnosis of typhoid in three main directions; first, its localization may deceive him. Typhoid fever may have a text-book symptomatology, or it may have no single suggestion of anything given in the text-book. It may, in the first place, begin with such marked cerebro-spinal manifestations that the physician is thrown off at once. It may not enter into his mind during a ten or twelve days' attendance upon a case that he is dealing with anything other than cerebro-spinal meningitis and a certain number of the cases of cerebro-spinal meningitis reported by Dr. McShane, I

will not say how many, but I would like to say a great many, are typhoid fever, with cerebro-spinal localization.

Beginning with headache, marked retraction of the head and neck, and in fact not a single feature of cerebro-spinal meningitis lacking, it is so clear to you that you do not care to look for the spots or examine the spleen. I am not thinking of theoretical cases, but cases which I have followed myself not only to the clinic, but to the autopsy room. I have records of some three or four cases in which a diagnosis of cerebro-spinal meningitis is made, but the autopsy clinched the diagnosis of typhoid. We have had one case here in which not only were the symptoms suggestive, but in addition to the spasm of the muscles of the neck and back he had clonic contractions of the head and arm.

Another localization is in the lungs or pleura. You see the case as one of pneumonia. The patient's first indication is a stitch in the side; you have a friction murmur and you are thrown off your guard entirely. The pleurisy cases are not so common as the pneumonia. We have had one well marked case in which the symptoms were characteristic of pleurisy and it was admitted and treated so for one week. The pneumonia cases begin with a pain

in the side, rusty expectoration, high temperature, tubular breathing and indications of the involvement of a lobe or the entire lung, and are more deceptive. You give a diagnosis of pneumonia; so it is, but about the tenth day, when you expect the crisis, it does not come; the temperature develops, the abdomen becomes tender and you have the extreme pleasure of telling the family that typhoid symptoms are developing. Now it is a blessing that Louis invented this name "typhoid symptoms." One of our errors of diagnosis was a case of that kind; an old man admitted with all the symptoms of pneumonia. It did not enter our minds for a moment that he had anything else than pneumonia until Dr. Welch examined him and then it was quite evident that he had typhoid fever.

Another mode of disguise is acute nephritis. That is fortunately rare, for the cases are almost invariably diagnosed as acute nephritis and not considered typhoid until a week or ten days have elapsed. Those are the chief errors of diagnosis and it is a point that I often find practitioners have not had their attention sufficiently called to; namely, that typhoid may begin this way.

There are certain conditions that simulate typhoid fever. The simple continued fever, about which we have heard so much, is a fever that runs a week or ten days. You are safe to follow Murchison's opinion that the fever with local manifestations persisting ten days in a temperate latitude is likely to be typhoid. You must bear in mind that there are cases of typhoid with fever as the single manifestation, no swelling of the abdomen, no headache, patient feeling well and anxious to get up and you may have the diagnosis demonstrated in a very unpleasant way; the patient being allowed to get up, perforation may occur and hemorrhage follow, as I saw in a case recently. We must have had six or seven cases in the past seven years in which the diagnosis of the fever was not made in the preliminary fever for which the patient came into the hospital. The tempera-

ture dropped two or three days after coming into the hospital, a period of apyrexia of three or four days and then the original disease was determined by the onset of a relapse.

There is only one disease in this latitude with which typhoid is likely to be confounded and that is the estivo-autumnal intermittent fever. Now when I tell you that only a few months ago we treated a case for five or six days, the blood examination had been made, not by Dr. Thayer or myself, I might remark, but it was made and it was not until the sixth day that we could determine that we had been tubbing and treating a case of malaria; you will understand that the similarity is very striking. In the first place take the mode of onset; as a rule in typhoid fever there is a much longer period of malaise. The patient is out of sorts for a long period and epistaxis occurs frequently. Herpes is a complication of typhoid and it is one of the commonest in malaria.

Chills and a chilly sensation are very common in both typhoid and malaria, the number of cases of typhoid beginning with chills being very considerable. Positive chills occurring at intervals of two or three days are more common, of course, in malaria, but if you take in consideration the chilly feelings they occur in about 50 per cent. of the cases of typhoid. There is a very great difference if you see the cases early, as you do generally in private practice, in the first or second week of typhoid or malaria. In malaria at the onset there are positive intermissions in the first week; in typhoid there are none; it is a gradual slope upwards. In the second week the difference is very marked. There is no single disease in which so steady a fever is present as in typhoid. We have now dozens of charts, even from cases under treatment by cold baths, in which the diurnal range did not exceed one and a half or two degrees.

Examination of the blood is, of course, an important point, particularly now since the Vidal serum diagnosis method. In a certain number of cases of malaria,

remittent and continued fevers, the examination of the blood has to be made repeatedly and often at short intervals, for the parasites are not present in the circulating blood in large numbers. It is very important that those who are to make examinations of the blood in malaria should have proper preliminary training.

Is there a typho-malarial fever? Yes, in the brains of the doctors, but not in the bodies of the patients. There is no combined hybrid disease and it is only due to Woodward to say that he did not recognize a hybrid disease. Typho-malaria is a villanous name and should be banished from our vocabularies and no doctor should ever use it, particu-

larly to his patients. It gives a man a wrong sense of security and the doctor wastes a lot of good medicine, a lot of quinine, for instance, because he thinks there is some symptom that points to malaria. I am happy to say that cases of typho-malaria are disappearing slowly from the health reports; they ought to be banished entirely. Chills, as I told you, occur frequently at the outset of a disease and they may occur throughout the course of a typhoid fever. The State boards of health hereafter should return to every physician who sends in a diagnosis of typho-malaria his blank and ask for something better. It is too late in the day, gentlemen, to make that diagnosis.

SANITARY SURVEY OF TOWNS AND VILLAGES FOR THE PREVENTION OF TYPHOID FEVER.

By John H. McCormick, M. D.,
Washington, D. C.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

No class of cases appeals to the interest of the physician, be he in city, town, village or country district, as do infectious or contagious diseases. In cities and large towns, the great mass of people crowded into a comparatively small area, the consequent lack of light and air, poor ventilation, faulty plumbing and the accumulation of dirt and filth, present an array of potent agents, favorable to the rapid dissemination of such diseases.

In the village and country, the small and poorly built houses, the absence of sanitary conditions generally, surface drainage, the water supply and the ignorance of people relative to general laws of hygiene, together with the peculiar habit, which is quite prevalent in this State, of servants going home to their families at night, are all avenues for the spread of infection.

But the difficulties encountered in preventing the spread of such diseases, and in eradicating them when once they have gained a footing, while seemingly greater in the city than in the country,

are, in fact, greater in village and country; for in the former there is a concentration of municipal authority to make and enforce local regulations, more or less satisfactory water and sewer systems, means of isolating and quarantining patients and premises, which effectually stamp out an epidemic in its incipency.

On the other hand, in the rural districts, the local town councils, or county officials, either do not have the power to create and execute health regulations, or else the fear of public criticism or censure restrains them from making any movement for the betterment of the sanitary conditions of the community. The inability to isolate patients, and establish a temporary quarantine, because of the prejudice of the family, and the pernicious practice of visiting the sick, for which the attending physician is himself largely to blame, many times not having the courage to incur the displeasure of the neighborhood by forbidding it.

The most prevalent zymotic disease

in the latter localities is typhoid fever, because the conditions mentioned favor its development. It is taken for granted that the etiology of typhoid fever is now settled beyond question, and that there are four sources of infection, one or all of which may be factors in any given case, and they are in order of frequency:

1. Impure water supply.
2. Imperfect drainage of a polluted soil.
3. Infected milk.
4. Other causes.

Since the source of the drinking water is usually from springs or wells and the opportunity for becoming polluted is very great, by reason of surface drainage, our first effort should be the removal of every means of infection, which it is practicable to do, and for this purpose, a few suggestions will be offered, by no means new or novel, but merely as a guide to formulate a system for the establishment and regulation of a sanitary condition in communities.

Such precautions in the country are not only desirable, but necessary, to afford immunity in the locality itself, but are of first importance to the cities, for a large percentage of the cases of typhoid fever, occurring in the fall months in cities, are found, upon careful investigation, to have been incurred in visits to the country, during the summer, and develop upon the return of the victim to the city.

Again the great quantities of milk used for infant feeding and other domestic purposes frequently becomes contaminated from the impure water used in washing milk containers, or the udders of the cows, or, as not seldom happens, with unprincipled dealers, by adulteration of the milk, as every one connected with a department of health, or analyzing chemist, has had occasion to learn.

This was clearly and graphically shown in a report made by a committee of the Medical Society of the District of Columbia, in June, 1894, based upon the returns of death certificates, recorded in the health office of the District.

The question to be determined was, did the great number of cases, with the high death-rate of 6.7 per cent., result from the pollution of the Potomac River, from which the city derived its water supply, or from the many pumps or wells scattered over the city?

The report covered a period of five years, from 1885 to 1890, and divided the city proper into four districts.

District 1. The southeast and southwest, fronting on the river and Eastern Branch.

District 2. The northeast.

District 3. The central.

District 4. The western, fronting on the south and west, upon the river and Rock Creek.

The total number of cases, including Georgetown and county, was estimated at 9220, based upon the assumption that each death represented ten cases of fever. The percentage of deaths in each district according to population is as follows:

	Population of region Police census, 1892.	Total deaths from typhoid fever in 5 years in each region.	Annual rate of mortality to 10-000 population per region.
I. (South).	62,218	197	6.3
II. (Northeast).	26,278	84	6.2
III. (Central).	70,865	179	5.
IV. Northwest).	49,966	114	4.6
V. (Georgetown).	16,344	52	6.3
County.	30,429	95	6.2

Now since the mortality of the entire District is 6.2 per cent. the southeast, Georgetown and county, are practically the same, while the central, with the densest population, is 5 per cent., and the western, with but 20,000 less population, is only 4.6 per cent.

The two latter are the best sewered and paved, and inhabited by the wealthier class, who use the river water, and who spend a good part of the year out of the city, while the others are poorly sewered or not at all, and drink from river and well water, the latter of which is more abundant in these sections, have less number of inhabitants per district, and a greater mortality.

From these facts two questions may be asked, why should the mortality be so high in the central and western sections, where the sanitary conditions are to a great extent all that could be desired, and where Potomac water is principally consumed; second, why does a higher mortality obtain in the other districts? Does the river water cause the cases, are they imported, or are they the result of local conditions?

Concerning the former, Dr. Theobald Smith demonstrated before the Biological Society of Washington, in 1892, that there existed a relation between turbidity and the presence of bacteria. "Bacteria were most abundant in winter, January and February having the highest average; August, September and October, the months of the greatest prevalence of typhoid fever, having the lowest. Bacteria, most of which were harmless, were most abundant after heavy rains, and their presence in association with turbidity proved the then source to be from the washing of the surface of the soil."

Therefore, we must conclude that a considerable percentage must be imported from the country, or else due to local causes; for reasons before noted the local sanitary conditions were reduced in these sections almost to a minimum, and this demonstrates that cities are interested in the sanitation of the country.

On the other hand, in the remaining sections of the districts, where a good part of the water supply is from wells, with a less shifting population, of less density, and a higher mortality, we find a great many privies or earth closets, showing conclusively that the fecal material has saturated the soil and, together with surface washings, has entered the wells and the consumers become infected. If this be true of the city how much more so is it the case in villages and the country, for as this same eminent authority above quoted further says: "The rainfall carries into the river whatever may happen to be on the surface of the soil, clay, manure from the fields, inorganic or organic matter of any sort."

The nature of the country through which the Potomac flows, much of it being mountainous, as well as the absence of large cities on its banks, diminish the risks of infection from this source. As the country comes more and more under cultivation, turbidity and impurity from the washing of plowed and manure-covered land will be more common. The possibility of the introduction into the water of the micro-organisms of typhoid fever is dependent upon its presence in localities washed by the Potomac and its tributaries.

To illustrate, in fourteen squares in the southeastern part of the city were found 289 privies, 355 closets with sewer connections, more or less leaky, and a mortality of 6.3 per cent. In the same number of squares in the northwest section 153 privies, 297 closets with sewer connections, and a mortality of 4.6 per cent., or nearly 50 per cent. less privies, and not quite 2 per cent. lower death rate. These figures are conclusive.

By a detailed study of the location of the pumps and the occurrence of deaths from typhoid, it was found that wherever a pump was located, well patronized by the public, around it would be found an area affected with typhoid, and an examination of the water usually proved it to contain noxious bacteria. These pumps, when found, the local authorities closed and the cases of typhoid speedily disappeared.

These facts are given in some detail to illustrate, because they have been personally investigated and because it is but the type of all such conditions. The location of sources of infection in cities and large towns is comparatively easy, because of the regularity of streets and the presence of facilities requisite for detection.

In the country and village this is not so; the irregularities of streets as to direction and grade, the absence of water and sewer systems, the close proximity of privies, earth closets, cess-pools, hog-pens, stables, the pernicious practice of housekeepers and servants throwing dirty dish and wash water out of the kitchen about the well, which is usually,

for convenience, near the door with the coping very low or absent, all favor the admission of bacteria into the well.

With such unfavorable conditions how can it be determined just what is the source of infection, unless you wait till after a case develops, when it is of course too late to prevent further cases which have been exposed to the source of infection, and this if found will only relieve one avenue of infection.

The only way is to make a sanitary survey of the community, if a village, and of the house and out-buildings near the well or spring, if a farm, for the latter if used as a dairy supply may infect the milk.

The following points in the survey should be noted :

1. Location of water supply (well or spring).
2. Location of privy or closet.
3. Location of stables or hog-pens, etc.
4. Topography of land.
5. Cases of infectious or contagious diseases.
6. Number of persons in house.
7. Disposal of slops, dish-water, etc.
8. Disposal of excreta.
9. General sanitary condition.
10. Attitude of public scavenger.

Beginning at an arbitrarily fixed point, the same for each lot or parcel of ground, say the northeast corner, the exact location of the well or spring is found, its distance from the house, privy and out-buildings, as hog-pen, stable, etc., is noted and marked upon a map, provided for the purpose.

In like manner points two and three are platted, and when completed, the exact location and relation of each to each is found and to the rest of the town or village. The topography of the land is then noted, for the following reason :

Let us suppose a house belonging to Mr. A upon one street or road, and one to Mr. B next, and Mr. C upon the next street or road, but abutting the two former at the rear. Mr. A's house is in a sanitary condition, his well or pump at his kitchen door, his privy is fifty feet to the rear, on one side a stable and hog-pen. Mr. B's house is a counterpart of the other; his well is thirty feet

from the house and in a nearly direct line with Mr. A's out-buildings, and about three feet lower; his out-buildings are one hundred feet from the house. Mr. C's well on the other street is near his house, which slopes from the front to the rear and about one hundred feet from the privy in Mr. A's house.

A case of typhoid develops in B's and C's houses, the cause is hidden, it cannot be accounted for, the houses of both are in sanitary condition. Let us investigate; fecal bacteria from Mr. A's closet saturate the soil and find their way into Mr. B's well, which is on a line and lower down; the surface washings from the hog-pen and stable run down the hill from Mr. A's to Mr. C's and infect his well; and so results two cases who are innocent sufferers, while Mr. A, the cause, escapes.

This is not a theoretical case, but the prototype of many, a case or two in evidence; Mr. T, living on the railroad, had a perfectly sanitary house and surroundings; his son contracted a severe case of typhoid and after investigation it was found the privy of Mr. M, on the opposite side of the railroad cut, some fifty yards away, built off from the side of a hill, drained into a small gully, which ran into a blind ditch, beneath the track, and ran on down the hill to a larger stream below, but passed within a few feet of the well and about twenty feet from its surface opening, and had saturated the soil to such an extent as to pollute the well.

Mr. S, some twenty miles from the above site, built a summer home, and used the closet that had been used by the workmen. The water was obtained from a beautiful spring upon the other side of the hill, across the railroad cut; three cases developed in this family, one fatal; a quantity of crude carbolic acid, placed in the closet, in twenty-four hours made the water of the spring unfit to drink, showing that the fecal bacteria had made its way down the hill and into the spring.

Thus it is of the greatest importance to determine the location of every well, closet, privy, stable and hog-pen, not only upon a given piece of property, but

on account of the topography of the land in its relation to others. A history of infectious or contagious diseases will give a clue to some unsanitary condition to be investigated and corrected.

The question of the disposal of excreta is one of the most vexatious with which town authorities have to deal. There are many methods of greater or less value, but all have many fatal defects; the natural environment, of course, is an important element and must be considered as a foundation in every method.

But the best method is the removal at stated periods of the contents of the privies, mixed with solution of sulphate of iron, lime, or permanganate of potassium made into a compost and used as a fertilizer, which can be done cheaply and to great advantage both to the corporation and the farmer.

In many communities, the authorities have no power to employ a public scavenger, or if the power, no revenue to defray the expenses, and each householder, by paying a small sum, say twenty-five cents per month, could enable the town to have a public scavenger.

The following points are recommended :

1. That the State Board of Health appoint a health officer in each county, to serve without compensation, who shall be the executive representative of the State Board and who shall be *ex-officio* president of the County Board of Health.

2. That the town councils or commissioners (corporate) shall nominate a

local health officer, who shall be confirmed by the State Board, who shall be the local representative of said Board, and shall be a member of the County Board of Health.

3. A County Board of Health shall consist of the local health officer of every corporate town in a county and he shall have charge of the sanitary conditions of said town and the adjacent territory, which shall be platted off, agreeable to such plans as the County Board may deem advisable.

4. These officers shall act in conjunction with town councils and the State Board, under such regulations as may hereafter be determined.

5. That every physician shall be required to isolate infectious and contagious patients and quarantine the premises.

6. That water-tight boxes be substituted for privies, cess-pools and earth closets.

7. That hog-pens be prohibited in corporate limits of towns or placed in a sanitary condition and made water-tight and elevated eighteen inches above the ground.

8. That all contents of privies be removed at stated periods by a public scavenger and made into fertilizer, as before noted.

9. That whenever a town council is incompetent to act, by reason or lack of authority granted by its charter or for any other reason, the State Board authorize and empower its local representative or local health officer to act in the premises.

1225 L STREET, N. W.

EXPERIMENTAL INFLAMMATION OF THE CORNEA.

GOECKE (*Boston Medical and Surgical Journal*) has studied the cells concerned in the inflammation of the corneas of frogs and pigeons, induced experimentally by injury to a small portion of it. He finds that the fixed corneal cells assume a certain power of amoeboid movement in the inflamed cornea and that

the daughter cells which arise from these are contractile and capable of motion. They are typical wandering cells, in his opinion. These newly-formed amoeboid cells move into the injured portion of the cornea, and there form new corneal tissue to replace that destroyed. Polynuclear leucocytes also appear from the neighboring vessels and carry off the dead material, etc.

WHAT THE COUNTRY DOCTOR CAN DO TO PREVENT TYPHOID FEVER.

By August Stabler, M. D.,
Brighton, Md.

READ BEFORE THE CONFERENCE OF HEALTH OFFICERS, HELD AT BALTIMORE, FEBRUARY 17 AND 18, 1897.

FAR removed from boards of health, hospitals, dispensaries and drug stores, the country practitioner is the recognized guardian of the public health and, as John Randolph told Dr. Price, he must "take the responsibility and feel it." Removed also from the centers of clinical teaching and scientific research he has not the many opportunities of refreshing his memory, renewing his courage and receiving and applying new and interesting ideas and methods in his work. He has no time to make and watch bacterial cultures and is too far from the laboratories where such work is done to rely on them for diagnosis. He must rely chiefly upon his own carefully trained senses and his theoretical and practical knowledge of disease to aid him in forming an opinion upon which may hang not only the life of an individual, but the health of a whole community.

The early correct diagnosis of each newly developed case of typhoid and careful attention to disinfecting the excreta of the patient with some reliable germicide, such as formaldehyde, must result in largely preventing the multiplication of the bacilli. If in addition to disinfecting the excreta, the patient has a sponge bath once or twice daily, followed by a little formalin sprinkled or sprayed on the sheets and clothing of the patient and cleanliness and good ventilation be insisted upon, the risk of directly infecting those in attendance will be reduced to a minimum. Of course, if the patient has diarrhea or involuntary evacuation, additional precautions must be taken to immediately disinfect all soiled clothing and to disinfect the hands of the nurse after touching soiled clothes.

Next, the water supply must be looked after. If the source be a spring it should

be thoroughly cleaned, disinfected with lime or potassium permanganate and efficient drains be cut so that no surface or storm water can flow into the basin. If the water of a well is used for drinking or washing, enough permanganate should be thrown into the well to render the water pink for twelve hours. The quantity required will be from one and a half to eight ounces, varying with the quantity of water and the amount of organic matter present.

When the water is low in the well the quantity required will not be so great if the proportion of organic matter be not relatively greater. This practice can be more efficiently carried out under the eye of the doctor than boiling the water, which ignorant people will seldom continue for any length of time. Dr. Cameron, Health Officer for Gallo-way, Scotland, contributes an article that throws much light upon the ever present question of well water. He says: "It is the practice or fashion now to disparage shallow wells as being *de facto* and inevitably liable to pollution; but we know enough of the distribution and functions of the nitrifying bacteria in the upper layers of the soil to see that if by a proper curb, cover, etc., storm waters and surface filth are excluded, all legitimate additions of manure and other organic matters to the surrounding surface soil will be completely mineralized long before they can reach the ground water.

"It would be impossible, if it were desirable, to abolish shallow wells; but there is no excuse for the retention of that abomination, the cess-pit, which, by discharging through leakage or otherwise putrid liquids into the earth at a depth below the bacterial or 'living' zone, is the cause of the pollution not only of most shallow, but of many

deep, wells, since no amount of percolation through the 'dead' earth suffices for real purification. The 'living' earth is the best of all possible filters and with the abolition of cess-pits and the direct application of excreta to the soil and the discontinuance of the practice of accumulating dung in heaps till the underlying soil is supersaturated with reeking filth, a properly constructed well, even of but six or eight feet in depth, should be practically free from the least risk."

"Wells are indeed the natural sources of water for human use and it is only human perversity that has marred their fair fame." The physician has it in his power to insist that all suspected

wells be disinfected and that all cess-pits and heaps of dung in the proximity of wells be removed. While insisting upon this he should explain that the action is for the benefit of those who have not yet contracted the fever, but may be infected by the water, and that all who are in the habit of using the water should join in bearing the necessary expense.

The lawyer gives his opinion and counsel, the city physician advises and prescribes for the sick, but the country doctor's word is law and, if competent and earnest, his commands will usually be obeyed, though it will often require vigorous language to overcome the inertia of the popular mind.

POST-FEBRILE INSANITY.

By Alexander L. Hodgdon, M. D.,

Dispensary Physician to the Department of Nervous Diseases, College of Physicians and Surgeons, Baltimore.

THIS is an insanity which is apt to supervene suddenly almost without a moment's warning. The physician may have seen his pneumonic patient shortly before the crisis. The temperature shoots rapidly downward until normal or possibly subnormal has been reached; the doctor sees his patient, is gratified that the heart and other vital organs have apparently weathered the storm, but after a few moments' conversation with the seemingly convalescent he discovers that all is not so well, as the integrity of the functions of the brain have been encroached upon.

The patient, as I have observed, may be apparently sane in nearly every particular save one, and that is the delusion that he is away from home, and, do what you will toward pointing out familiar objects, such as a prominent building which may be seen through the window from his bed, yet he will consider that he has discerned correctly and that all others are deceived as to the surroundings. In another instance the crisis may have occurred, the patient is weak but apparently convalescing nicely, when in a few days following the defervescence of the fever you

may be hurriedly summoned to the home of the patient, the very greatly alarmed wife greeting you with the intelligence that her husband despite her most earnest entreaties insists upon going down to his office and attending to business; you go upstairs, see a man so weak that he staggers along the hallway as he walks, almost completely dressed, and ready to leave the house. You speak to him and explain the very great risk of any such course of action, argue with him as to the advisability of his returning to bed, and finally convince him that bed is the best place for him; he retires to bed and with good nourishing food and appropriate treatment makes a speedy recovery.

This form of mental trouble is evidently a reactionary insanity; the excessive stimulation of the cerebral centers by a high temperature being abruptly withdrawn at the time of crisis is followed by a series of morbid phenomena, which may terminate in complete recovery or lapse into chronicity. As to the fevers most liable to be followed by mental aberration, I would state, according to my experience, that it occurs far more frequently as a sequel

of croupous pneumonia than any other fever,

Clouston says, "I went over the records of over a thousand cases of insanity that were sent to the Carlisle Asylum and found that among these had been ten cases of such post-febrile insanity, four of which followed scarlet fever, two smallpox, one typhus, one typhoid, one intermittent, and in the tenth case, I could not ascertain the exact form. These are small numbers on which to base my conclusions in regard to a disease, but I am not aware of any fuller statistics on the subject. I think these numbers represent in a general way the comparative frequency of its occurrence after the different fevers. Scarlatina is unquestionably the most frequent cause, and smallpox the next. It is said to follow typhus more frequently than typhoid and as intermittent fever is now very infrequent in this country, this is a very rare cause of the disease." (Mental Disease, Clouston.)

Savage says: "I do not think it matters whether the disturbance is due to local inflammatory disease such as pneumonia or pleurisy, or to pleuritic, scarlet or typhoid fever. Besides the above forms of mental disorder, I have seen insanity associated with the outbreak or incubation of scarlet fever and in such cases the early onset of delirium, of a marked kind, has been followed by mania, which again has been followed by the specific rash. In several such cases the acute mania passed off with the development of the specific symptoms of the fever but in others the two diseases were both present." (Insanity, George H. Savage.)

Spitzka says: "The term post-febrile insanity is given to disorders which complicate the crisis, or what would ordinarily be the convalescent period of certain acute febrile processes, such as scarlatina, smallpox, typhoid, pneumonia and erysipelas. The insanity noted with the secondary fever of syphilis appears to the writer to belong to this group also." (Manual of Insanity, Spitzka).

Maudsley says: "The viruses of acute fever, as typhus and typhoid,

scarlatina and smallpox, may notably act in the most positive manner on the supreme nervous cells giving rise to mental torpor and stupidity or to an active delirium; they still predispose sometimes to an outbreak of insanity during the decline of the acute disease—a post-febrile insanity." (Pathology of Mind, Maudsley.)

As to the prognosis of the affection I consider it favorable if the case be seen in the beginning and treated energetically. Clouston says: "Of my ten cases only the above-mentioned patient and one of the scarlet fever patients had acute symptoms of any sort and they were the ones who recovered; all the others were incurable, hopelessly demented, and the two others hopelessly melancholic. There was hereditary predisposition to insanity in only three of the ten cases.

"Post-febrile insanity may be said, therefore, to be generally characterized by subacute symptoms, to result from the brain being poisoned by zymotic poison and exhausted by fever not to require hereditary tendency for its development and to be a very incurable form of insanity from the beginning." (Mental Diseases, Clouston.)

It may be possible in this disorder that even a few hours without treatment may convert a disease with a favorable prognosis into one extremely unfavorable in so far as ultimate recovery is concerned. I consider it good treatment to begin immediately upon the supervention of this form of insanity to give full sedative doses of bromide of sodium and tonic treatment in the form of nourishment and stimulants. It may be that in asylum treatment the patient is not seen sufficiently early after the first symptoms have made themselves manifest, or the surroundings of the institution may be particularly unfavorable to the successful treatment of this form of insanity; it suffices to say that probably all cases of insanity, of every description, would be much better outside than in an asylum, if the treatment were intelligently carried out and the means of the patient permitted of both a day and night attendant.

Society Reports.

CONFERENCE OF HEALTH OFFICERS OF THE STATE OF MARYLAND.

HALL OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND.

HELD FEBRUARY 17 AND 18, 1897.

SECOND DAY, THURSDAY, FEBRUARY 18.
NIGHT SESSION.

THE meeting was called to order by Dr. E. M. Schaeffer at 8.30 P. M., who said: Dr. Stokes will pardon me for saying that the Committee on Sanitation consider him as the first fruits of their efforts. He was appointed by Mayor Hooper to his important position and was elected unanimously and we have had great pleasure in hearing from him today. I will now have the pleasure of introducing to you the head of the city health department, Dr. James F. McShane, who has been such an efficient health officer of Baltimore.

Dr. Wm. Osler then read a paper on THE DISGUISES OF TYPHOID FEVER. (See page 423.)

Dr. August Stabler, Brighton, then read a paper entitled WHAT THE COUNTRY DOCTOR CAN DO TO PREVENT TYPHOID FEVER. (See page 430.)

Dr. John H. McCormick of Gaithersburg then read a paper entitled SANITARY SURVEY OF TOWNS AND VILLAGES FOR THE PREVENTION OF TYPHOID FEVER. (See page 425.)

Dr. John S. Fulton then gave AN ILLUSTRATION OF THE BENEFITS OF ISOLATION IN EPIDEMICS OF TYPHOID FEVER.

Dr. L. G. Smart: I move that a committee of seven be appointed as a nominating committee to select permanent officers for the organization. The motion was seconded by Drs. Stokes and Cuncell and adopted by vote of the meeting and the Chair appointed Dr. L. G. Smart, Dr. W. R. Stokes, Dr. A. W. Clement, Dr. W. M. Lewis, Dr. Wm. Osler, Dr. Philip Briscoe and Dr. G. H. Rohé.

Dr. Schaeffer offered the following resolution:

Resolved, That the health officers of the State of Maryland, in open confer-

ence, hereby extend their moral support and best wishes to the Burgess and Commissioners of New Windsor, Md., in their battle for municipal cleanliness.

The resolution was seconded and adopted.

Prof. Penniman: As many of us are not members of the Faculty and as the use of these rooms has been so kindly put at our disposal I move that a resolution of thanks be extended to the Faculty for the use of their Hall and that the resolution be extended through our Secretary, Dr. Fulton. The motion was adopted.

Dr. Cuncell: I move you that a vote of thanks be extended to the members of the Faculty of the Baltimore Medical College and of the College of Physicians and Surgeons, expressing our appreciation of their kindness and attention to us during this conference.

Dr. Fulton presented a resolution of thanks to the Press of Baltimore.

The Committee on Organization submitted the following report:

First, it recommends that the Association be called the Maryland Public Health Association.

Second, that it will hold two meetings a year.

Third, that it selects the following officers:

President, Dr. W. H. Welch, Baltimore; Vice-Presidents, State Senator Chas. Westcott, Chestertown; Mr. H. G. Weimer, Mr. Chas. Hartshorne, Brighton; Dr. Philip Briscoe, Island Creek; and Mr. Henry Brauns; Secretary, Dr. John S. Fulton, Baltimore; Treasurer, Dr. L. G. Smart, Roland Park.

The Conference then adjourned *sine die*.

BACTERIAL TREATMENT OF CANCER. —Experiments tried by Peterson in Czerny's clinic on the effects of bacterial therapy on malignant tumors show that while very exceptionally sarcomas apparently disappear, it is 'worthless' in carcinoma and is also dangerous to health and life. This is not very encouraging, but such treatment may be used in hopeless cases.

Medical Progress.

THE EARLY DIAGNOSIS OF TUBERCULOSIS.—Whether the diagnosis of tuberculosis in its early stages is simple or not, depends upon what is understood by "its early stages." It is, therefore, rather questionable teaching, says the *Medical News*, to maintain that the signs observed even in the earlier stages are easily enough recognized by the merest tyro in auscultation. That localized dulness at the apex, the prolonged high-pitched expiratory murmur, the circumscribed râles, the hemoptysis and the dry, hacking cough, are too significant to leave any doubt in the minds of the most casual observer, is true enough. But who in these days would think of regarding such physical signs and symptoms as indicative of an early stage in tuberculosis!

It is indeed commendable in our "merest tyro" to make a diagnosis even at this juncture, and he is to be encouraged in his desire to make such diagnosis, but he must not, by this flattering success, be deluded into the belief that he is recognizing phthisis in its early stage, or hope thereby to stay the progress of the disease. Our "tyro" must be informed that more modern methods of investigation have discovered instruments of such precision and tests of such reliability and accuracy that they discount by many weeks and months the date at which the stethoscope is of diagnostic value. The persistent presence of tubercle bacilli in the sputum of a patient, even when all other diagnostic signs are absent, is a menace to his welfare, and must be reckoned with by the attending physician. On the other hand, localized dulness in the lungs, with prolonged high-pitched expiratory murmur, and circumscribed râles, with cough, fever and emaciation, have been confidently conducted to a successful issue, when repeated examination has shown an absence of the bacilli from the sputum.

But a still more delicate criterion, and one that is rapidly coming into use among experts, is the tuberculin test. Koch has used this with most reliable and satisfactory results in five thousand

cases in which physical signs were absent and in which bacilli could not be discovered in the sputum. The Health Board has also been using it in suspicious cases, in which all other tests proved negative, with most gratifying results as to the accuracy of its revelations. And Dr. Trudeau of Saranac, in a recent personal interview, declared that after careful and long continued observation he had come to regard the presence or absence of reaction after tuberculin injections as the final and decisive test in cases of supposed cure. In the case of patients who no longer present any clinical evidence of the disease, it is getting to be his custom before declaring them cured and consenting to their return to former homes and occupation, to subject them to the tuberculin test. When no reaction occurs the patient is pronounced cured, but when the characteristic phenomena are present the clean bill of health is refused. In a paper presented recently before the New York Academy of Medicine, the same authority said: "If there is expectoration and the presence of the bacillus cannot be detected by repeated and thorough examinations, a positive conclusion can often be reached within three weeks by inoculation of the expectoration in the guinea-pig, and when there is no expectoration, by the tuberculin test."

* * *

COMMON SENSE ON THE ALCOHOL QUESTION.—However temperate a man's own views may be on any such question as that of the use of alcohol, he is tempted to lean in his public utterances toward the contention of fanatics. He may not go to the extremes that they contend for; indeed, he is almost sure not to. But he is apt to make statements by which they can strengthen their case with the public and especially with the legislators. It is refreshing to notice, says the *New York Medical Journal*, a recent exception in the case of Mr. Pellaw, of the department of chemistry of Columbia University, who recently concluded a course of lectures in the Museum of Natural History on the subject of the effects of alcohol.

Mr. Pellew stated without reserve, and backed up his statement by citing the most careful observations and experiments of well-known investigators, that "there was no doubt that, even in health, a small amount of alcohol, if given in divided doses, could be burned up in the blood and serve as food, without producing any injurious effects." We are quoting from the *Sun's* report of Mr. Pellew's last lecture. He went on to say that in diseased conditions, where nutrition was impaired, alcohol could be given in greatly increased amounts without any intoxicating effect and was then of enormous value. An ounce of it, he said, gave as much heat as seven or eight ounces of beef, and that without having to undergo the process of digestion and assimilation. In other words, it burned, "as in a lamp, without wasting the wick."

On the other hand, the popular notion that alcohol will keep up the heat of the body under exposure to great cold was declared to be a mistake. Alcohol, said Mr. Pellew, actually reduced the temperature of the blood, but it was of service to restore equilibrium after the exposure was over. The lecturer was not backward in depicting the horrors of drunkenness, to which, of course, no reasonable man can shut his eyes. He spoke of the dram-drinking habit as a nervous disease rather than a vice. He properly insisted that, in health, the only good effects of alcohol, "except, indeed, its action as a 'scavenger of mankind,'" came from its moderate use.

To show the astonishing amount of intemperance in the so-called temperance doctrines at present promulgated, Mr. Pellew read passages from the books on "physiology" to which the law now requires the teachers and pupils in the public schools of the State of New York to devote a large proportion of their time. He pointed out the "absurd doctrines, not to say absolute falsehoods," which in many cases were thus crammed into the children's heads. The *Sun's* account concludes as follows: "In his opinion, it is confusing to a child to learn that it is a sin to pick a pocket

and to drink a glass of wine, and he suggested the state of mind of a Teutonic father or grandfather when his young hopeful would read to him, from his school books, how the 'use of beer, more than of any other liquid, tends to make the drinker selfish, cruel and brutal.'"

* * *

INTUBATION FOR CROUP IN COUNTRY PRACTICE.—Abarnou (*British Medical Journal*) has collected 26 cases of the above, 18 of which recovered, leaving a mortality of 30.7 per cent. only. The tube was once obstructed by false membranes and coughed up, but, as pointed out by Bokai, from an experience of 538 cases, it is an exception for the false membrane to be pushed back by the tube, and accidents due to the operation are rare, and still more rarely serious. The introduction of sero-therapy has been an important factor in the adoption of intubation, which is now commonly practiced, not only in hospitals, but in many towns; the continued presence or proximity of the medical attendant is not necessary and Abarnou concludes that, when the technique is better known, intubation will become the operation of choice, and tracheotomy one of necessity only, even in country practice.

* * *

INTERNAL ESOPHAGOTOMY.—Weber (*Medical News*) has collected all the known cases of internal esophagotomy since 1861. There are twenty-five of these. As regards instruments, those which cut the stricture from above downward are bad, as it is impossible to tell how far the instrument will cut. The incision should be made from below upward. The best instrument is one devised by Schiltz, in which the blade is protected and passed through the stricture. It is then projected to a known distance and is drawn upward, cutting its way through the stricture. Several shallow cuts are better than a single deep one. One can cut to a depth of two millimeters without danger.

The operation has usually been performed for esophageal strictures.

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BALTIMORE, MARCH 27, 1897.

THE Chairman of the Faculty's Programme Committee, Dr. Hiram Woods, has sent out the following notice:

*The Medical and
Chirurgical Faculty.* "The annual meeting of the Medical and Chirurgical Faculty will be held in Baltimore at the Faculty Hall on Tuesday, Wednesday, Thursday and Friday, April 27 to 30 inclusive. On Tuesday evening there will be the annual discussion, the subject selected being 'Peritonitis.' Only four speakers have been appointed, and it is the desire of the Committee to have this part of the meeting generally participated in by the members of the Faculty. The annual business meeting will take place on Wednesday evening, and on Thursday evening an address will be delivered by Professor Cheever, of Harvard University, to be followed by the banquet at which members from the counties are to be the guests of the city members. The four day sessions are to be given to volunteer papers. In the opinion of the committee, these should not be longer than fifteen minutes. To insure the mailing

of the programmes in time, it is necessary that titles of papers or cases be in Dr. Woods' hands by the 13th of April."

It seems hardly necessary to call attention to the importance of the annual meeting of the State Society. For the past few years these meetings have been well attended and the State members from outside of Baltimore have attended fairly well. They seem more and more inclined each year to take an active part in the proceedings and have rendered great assistance in the making up of a successful and attractive programme.

There is, however, always the danger of crowding up the list of papers with, and naming, a grand array which might frighten off some who would otherwise attend. The time limit should be strictly adhered to and papers and discussions should come strictly within the specified period allotted. There is a tendency for members to fill up the programme with titles of papers which they have no intention of reading and have not even written.

It would be a good idea to follow the example of other societies and demand in advance an abstract of all papers to be read. This will avoid to some extent the "fake" papers and show what will really be given. Live topics outside of medical science should occasionally find place on the programme and such a one as hospital and dispensary abuse if presented in an honest way by men sincere and of some weight will certainly find a hearty reception. The full list of papers will be announced in these columns later.

* * *

WITH the approach of balmy spring the average medical man seems to have on hand ideas which he proceeds to present to the profession *Spring Medical Meetings.* through one of the many medical societies. This year is especially prolific in society meetings. The American Medical Association holds its forty-eighth annual meeting and its fiftieth anniversary in Philadelphia in June, and in such a medical center on such an occasion there will doubtless be many present and the interest will be great. The British Medical Association will meet in Montreal early in August. The Congress of American Physicians and Surgeons will hold its fourth session in Washington the first week in May and as this body is composed of the representative men of this country, the work done

will be, as it always has been, of a very high order.

Then later the Twelfth International Medical Congress will be held in Moscow in August, and while the place selected is rather unfortunate, the meeting will undoubtedly be productive of much good. Besides the American Medical Association in Philadelphia, there will also meet there the National Conference of Examining Boards and the American Academy of Medicine.

With all these meetings the long-suffering profession will probably be obliged to listen respectfully to what they already know and be bored by old matter which has already been presented much better before, but some little good can perhaps be picked out of all these papers and discussions, and besides, no small part of the pleasure and profit of such meetings is in the exchange of personal greetings and the making of new acquaintances and the renewal of old ones.

CLEVELAND, Ohio, has long been famous for its wealth and its beautiful avenues. As a medical center it is evidently on the boom. The abundance and severity of its cases of enteric fever has rendered it possible for one of its physicians, Dr. Chr. Sihler, to present us with perhaps the best treatise on the Brand method and its home applications published in English, the text-book directions of the other writers deviating greatly from Brand's teachings and being founded on hospital work.

Now the *Cleveland Medical Gazette* presents itself monthly in impressive garb and with Dr. Hunter Robb's name among its collaborators. There is good meat, too, in its pages. The contribution of the editor, Dr. Samuel W. Kelley, to the September issue is an elaborate review of the status of pediatrics in America and Great Britain. Desiring, like some other pediatricists, to know "where he was at, anyhow," Dr. Kelley sent letters of inquiry to teachers of this branch in the schools of this and the other side of the water.

Answers showed great diversity of opinion as to the possibility of strictly medical pediatrics becoming a specialty. There is evidently a keen appreciation in America of the need of special study and instruction in children's ailments and peculiarities, also of the

fact that a wide experience in general practice is the only proper basis for the specialty of pediatrics, which will soon become a familiar feature in our great cities. It will still remain, however, a great department of inner medicine, although on an equal footing with "adult" medicine. It is evident that neglect of pediatrics in the schools is a mark of fossilizing tendencies.

A PHYSICIAN writing to the daily press on the subject of legislation to obtain higher medical education, asks how can students receive the best education and be able to pass a certain grade when the teachers in most medical schools are subject to no board of control nor do they have to pass an examination to show their fitness as teachers. This has some element of reason in it.

If the source is diseased the stream will not be healthy. If a medical school is made up of poor, badly educated "professors" the graduates will not come up to a high standard. Most centers of education demand a certain standard to which their teachers must measure up before they are accepted, but the medical schools are glaring exceptions to this rule.

In most States any twelve men may come together, put in a small amount of money, agree to start a medical school, with ease obtain a charter and issue diplomas which shall carry with them the degree of M. D. just as much as the oldest and strongest medical school in this country. Medical schools make advances only when forced by competition to do so, but there has been progress in the past few years and there is every reason to believe that more and great advances will be made in the near future.

Higher medical education is demanded not only on account of the large number of physicians in the land, but because, as a result of this large number, competition becomes sharper and the result is harmful, for too often unprofessional means are taken by men to obtain practice. Such men are compelled to think of the money to be earned as a support and the scientific pursuit becomes a low trade. Therefore, any steps which will give us better, more honorable and fewer physicians should be considered and advanced.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 20, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		21
Phthisis Pulmonalis.....		26
Measles.....	21	
Whooping Cough.....		
Pseudo-membranous Croup and Diphtheria. }	15	5
Mumps.....	4	
Scarlet fever.....	19	
Varioloid.....		
Varicella.....	1	
Typhoid fever.....	6	2

Denver wants the American Medical Association in 1898.

The Medical Journal Club held its annual banquet last week.

Oklahoma has one physician to each two hundred of population.

Buffalo now has a law forbidding the use of the rubber tubes to the nursing bottle.

Spectacles borrowed from ophthalmologists and oculists have been the means of carrying contagion.

New York now has a law making it a penalty for one not a licensed physician to have in his possession an anesthetic.

One of the general addresses before the Twelfth International Congress at Moscow will be delivered by Dr. Nicholas Senn of Chicago.

The National Confederation of State Medical Examining and Licensing Boards will hold its seventh annual meeting in Philadelphia on May 31.

Of 19 persons on whom the degree of Doctor of Medicine was conferred by the University of Geneva during 1896, no fewer than 7 were women.

St. Luke's Hospital in New York is making an appeal to the profession to send it free patients for its hospital and dispensary and asks also for donations.

Chicago is considering a very wise ordinance prohibiting the sale of all catarrhal snuff remedies which contain cocaine.

The City and County Medical Society of Lancaster, Pennsylvania, recently held its fifty-second annual reunion. Dr. Alexander Craig of Columbia was toastmaster.

The *Medical Record* states that Dr. David Cerna has been appointed Mexican Consul at Galveston. Dr. C. W. Chancellor of Baltimore has been Consul at Havre for years.

The Anti-Cigarette Bill is likely to become a law in New York. It prohibits the sale of cigarettes to minors or within 250 feet of a church or school and fixes the license fee at \$50.

The Executive Committee of the Maryland Public Health Association is personally inviting those especially interested in hygienic matters to become members of this new organization.

The local profession in Philadelphia, through Dr. H. A. Hare, Chairman of the Committee of Arrangements, is making great preparations for the coming meeting of the American Medical Association in June.

The Officers of Bellevue Hospital, New York, have secured a plot of ground on the corner of First Avenue and Twenty-sixth Street, 100 x 150 feet, adjoining the Carnegie Laboratory. Upon this site they propose to erect a modern and substantial structure. The work will begin immediately and the building will be ready for occupancy on September 1.

Dr. William Osler of Baltimore will deliver the address on medicine before the British Medical Association at the Montreal meeting in August next. Dr. Stephen Mackenzie will be Chairman of the Section on Medicine, Mr. Christopher Heath of the Section on Surgery and Mr. Watson Cheyne of the Section on Pathology. Lord Lister has announced his intention to be present.

The sum of £80,000 (\$400,000), already announced as a donation of the Baroness Hirsch to the Pasteur Institute will, in a few days, be in possession of that establishment. This sum will be applied to the foundation of different laboratories needed and to the increase of the yearly remuneration of the scientists who devote themselves to the researches carried on at the Pasteur Institute.

Book Reviews.

EATING AND DRINKING. The Alkalinity of the Blood, the Test of Food and Drink in Health and Disease. By Albert Harris Hay, M. D., Chicago. A. C. McClurg & Company, 1896. Pp. 304. Price, \$1.50.

To judge from the preface, the writer of this work has intended this both for physicians and laymen. There cannot be any doubt that the former would be greatly benefited by a careful study of the subject matter, but we fear that the laymen will scarcely be able to follow the author in his scientific considerations. From the standpoint of the physician the work is really well written and contains a host of invaluable information. In the preface the writer states that as the result of investigations he has found that the varying reactions of the urine show those of the blood, and thus afford an easy and accurate means of determining its conditions. While we share this view to a certain extent, we can scarcely admit that the time has come when we can rightfully assert that this and that article of food increases and diminishes the alkalinity of the blood, and can build up a system of diet upon such a basis. A knowledge of the compositions of various articles of food will not always enable us to predict what the effect of such and such a diet will be upon the alkalinity of the blood. The character of the metabolic process is here of prime importance and there will naturally vary with the age and sex of the individual, the amount and character of the exercise taken, etc. We are glad to see that the writer shares our opinion that the bacteria in the intestinal tract do not serve any useful purpose. In conclusion we may state that while we differ from the writer in some of his assertions and deductions, we have read his book with much interest, and can warmly recommend it to physicians. The publishers' work has been well done.

HOPKINS'S POND AND OTHER SKETCHES. By Robert T. Morris. New York and London. G. P. Putnam's Sons. 1896.

The value of a hobby to every hard worked man is well illustrated in these delightful sketches. One would hardly guess that the almost poetical and certainly restful descriptions are from the pen of an authority on appendicitis and a host of other subjects on surgery. Dr. Morris has brought out a book which cannot but be admired by the true

sportsman and lover of nature. This work stands in pleasing contrast to some attempts at literary style produced by physicians with an ambition for story writing. The publishers have given their usual attention to the book-making.

THE EDWARDS & DOCKER Co. of Philadelphia have in press "The Eye as an Aid in General Diagnosis." By E. H. Linnell, M. D.

LECTURES on Angina Pectoris and Allied States, by Dr. William Osler, have been reprinted from the *New York Medical Journal* and are now offered in book form by D. Appleton and Company. Price \$1.50.

REPRINTS, ETC., RECEIVED.

An Improved Surgical Bed. By August Schachner, M. D. Reprint from the *Annals of Surgery*.

Dilatation of the Stomach in Infants. By Thomas H. Buckler, Jr., M. D. Reprint from the *Atlantic Medical Weekly*.

The Quantitative Estimation of the Rennet-Zymogen. By Julius Friedenwald, A. B., M. D. Reprint from the *Medical News*.

The Importance of Saliva in Gastric Digestion. By Julius Friedenwald, A. B., M. D. Reprint from the *International Medical Magazine*.

Report of the Surgeon-General of the United States Navy; chief of the Bureau of Medicine and Surgery to the Secretary of the Navy. 1896.

Report of Three Cases of Phthisis Pulmonalis, Following Scald of the Chest. By J. N. Hall, M. D., Denver. Reprint from the *Medical Record*.

De l'Emploi de l'Ichthyol dans le Traitement de la Tuberculose Pulmonaire. By Dr. Maurice Le Tanneur. Reprint from the *Journal de Médecine de Paris*.

The Therapeutic Value of Hydrobromate of Scopolamine in Plastic Iritis. By Charles A. Oliver, A. M., M. D., Philadelphia. Reprint from the *American Journal of the Medical Sciences*.

New Method of Performing Intestinal Anastomosis with Special Reference to its Adaptability to Inguinal Colostomy and Subsequent Restoration of the Fecal Current. By J. A. Bodine, M. D., New York. Reprint from the *Medical News*.

PROGRESS IN MEDICAL SCIENCE.

DANGEROUS SPURIOUS IMITATIONS.—The attention of the medical profession is earnestly directed to the various dangerous decoctions masquerading as coca wine. These decoctions are intended as meretricious imitations of the standard French preparation, "Vin Mariani," which has been so widely endorsed by and whose merits are so well-known to the medical fraternity. Investigation discloses that these so-called coca wines are generally variable solutions of the alkaloid cocaine, in sweetened wine of a low grade (artificial wines). These spurious and dangerous preparations are having the effect of causing misapprehension and working an indirect injury to a really valuable drug, for the real usefulness and value of coca, when conscientiously prepared and properly administered, have long since been recognized by the medical fraternity. Physicians will not encounter disappointment whenever using "Vin Mariani," the standard French coca wine, as an adjuvant in treatment, as a tonic-stimulant, and as a restorative in cases of profound depression, anemia and exhaustion. It has stood the test in practice during nearly thirty-five years and during that period there have been placed on file by Mariani & Co. more than eight thousand endorsements from leading practitioners, all coinciding as to the merits of "Vin Mariani." Physicians are, therefore, earnestly urged, when prescribing coca, to insist that their patients procure "Vin Mariani," thus avoiding any failure in results and insuring positively no unpleasant or dangerous after-effects.

THE CURE OF THE MORPHIA HABIT.—In the treatment of the opium habit, Thomas Osmond Summers, M. A., M. D., F. C. Sc., London, gives the following as his experience with the use of Melachol: In administering Melachol for the cure of the morphia habit, a large dose should be administered at the very outset. This, as anyone thinking for a moment would see, is for the purpose of putting each cell under the intense stimulus of a contrary or unusual influence. This breaks up at once the habitude. It is my rule, first, on rising in the morning, to give two ounces of Melachol largely diluted with water. After the toilet is made and just before breakfast, which should be very light, I give 1-100

grain of arsenic in cases where "the lungs are weak." The following is the prescribed line of treatment in most cases; to be modified *pro re nata*: On rising in the morning, one-half tumbler of water and Melachol. If difficulty of breathing, take five drops of Fowler's solution, immediately after eating, three times a day, in a wineglass of water. Coffee and rare beef at breakfast. No pork should be used. If addicted to the use of tobacco, a cigar after each meal. Every three hours through the day take a teaspoonful of Melachol. Drink seltzer and milk at intervals through the day. Move out in the open air, if atmosphere is favorable. At night, just before retiring, take a hot hip-bath. Follow this with a strong whiskey toddy, or, if preferable, a strong cup of tea, for while these may seem antagonistic in effect, their ultimate effect I have found to be pretty much the same in these cases. The next morning not so much Melachol should be used, say only before breakfast, and afterwards through the day at intervals of three or four hours, according to the restlessness which appears. Fowler's solution may be kept up several weeks with benefit. During this time the patient should only take the quantity of morphia allowed by his physician; which in most of my cases generally amounts to almost nothing. Pleasant surroundings, interesting books, intense pursuits, all act powerfully to support a patient under this trying ordeal. I say nothing of his own will-power, for the reason that the patient should give himself entirely up to his physician, whose will should take the place of that which is temporarily suffused. Nothing further than this is needed in the most aggravated cases but the judicious handling of the arising symptoms by the physician and the kindly moral support which goes so far toward the favorable ultimate issue of all neurological cases. I have seen some of the most inveterate habitues cured completely within three weeks.

I HAVE found Cactina Pillets useful in cases of functional disorders of the heart. One lady with anemia and a very rapidly beating heart (after moderate exertion) has felt obliged to use the Pillets daily. They have steadied her heart, relieved her nervous anxiety and have done her much good.—C. H. BROCKWAY, M. D., Worcester, Mass.

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Original Articles.

SOME PHYSICAL AND THERAPEUTIC FACTS ON STATIC ELECTRICITY.

By Francis A. Bishop, M. D.,

President of the Medical and Surgical Society of the District of Columbia, Vice-President of the
American Electro-Therapeutic Association, Director of the Electro-Therapeutic
Clinic at the Eastern Dispensary, Washington, D. C.

READ BEFORE THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA, WEDNESDAY, JANUARY 27, 1897.

AS THE galvanic current by chemical action decomposes water, and as the constituent elements are separated, the oxygen is attracted to the positive pole and the hydrogen to the negative pole. So static electricity, by chemical action, decomposes air, and as its constituent elements are liberated the oxygen is attracted to the positive pole in a condition known as allotropic oxygen, or ozone. Very large quantities of ozone are generated by any electrostatic machine in motion; and from this fact Adkinson claims that it "is conclusive evidence of the action of the machine on air, from which we must infer that the electric energy of the air itself is brought into action by the inductive action of the machine, producing ozone."

There are many methods of producing ozone, but undoubtedly the most abundant supply is by the action of the electrostatic machine on air. This is very evident to any one who uses the static machine; for instance, if the air is quite dry, and the atmospheric resistance consequently very great, when the machine is set in motion and the discharging rods separated, the air becomes supercharged with ozone and the odor and taste is very perceptible. And as oxy-

gen in any form of electrolysis accumulates at the positive pole, it is natural to suppose that in static electricity the oxygen of the air in the neighborhood of the negative pole is diminished, while it is condensed at the positive pole.

It is the nature of static electricity to accumulate upon globular masses, and when approached by a surface or another globular mass connected with the earth, a disruptive discharge is the result; while a fine point or brush produces a convective discharge.

In view of these physical facts my static cage has been constructed. It consists of a circle of wire netting, brass chains from the top; tinsel brushes are fastened to the inside of the cage and to the brass chains above. The patient is placed inside the cage, upon a metal covered insulated platform; the platform is attached to the positive pole of the machine and the cage to the negative pole; and when the machine is set in motion the current is drawn from the patient by every tinsel brush in the form of a convective discharge. The result is a tingling sensation over the entire body. The head being a globular mass, the positive current is more con-

centrated at that point, consequently the allotropic oxygen accumulates thickly around the head and face. This necessitates the inhalation of the oxygen, while the exhalations are carried off by the current as a convective discharge.

The entire surface of the body is at the same time subjected to a most delightful stimulating brush discharge that intensifies the peripheral circulation and often produces a pleasant and healthy glow, with a feeling of comfort and exhilaration which lasts from one to several hours. Metabolism is made more active, carbon dioxide eliminated, the volume of urine is often increased; and that the blood is directly acted upon is often very evident by the rosy hue that comes to the cheeks. This treatment I call my ozone bath, and is used with all delicate subjects, as a general tonic, whether they are treated by medicine, other currents, or both.

Experience has taught me to use some precaution in treating for the first time very delicate subjects, as all patients at first are not affected alike. One case of chorea complicated with chlorosis, on two occasions, had to be taken quickly from the cage and placed in a recumbent position to keep her from fainting. But by carefully regulating the flow of current, she gradually improved, until she could stand the full supply; after which she made a very rapid recovery. After the first week it was very interesting to note the healthy glow on that young girl's cheeks after each treatment.

I have now under treatment a case of chorea of three years' standing, in a young girl of eighteen years of age. This case was brought to me by Dr. Louis Johnson and was quite a severe one. The lower extremities were principally affected and the case had many symptoms in common with posterior spinal sclerosis. She has received treatment on an average of only once a week for about three months. She can now walk alone for two or three squares; when she first began treatment she could not walk, or stand, without assistance, nor could she get on and off the stool that I use with my static machine.

This she does now without difficulty. Amenorrhea and dysmenorrhea I find yield more readily to local treatment when followed by tonic treatment in the cage with the ozone bath.

An interesting case is that of a lady, who had been treated by me several years previously and cured of a very acute attack of nervous exhaustion, with such symptoms as insomnia, flushes of heat, constant fear of becoming insane, palpitation, with dread of sudden death. Her principal obsession was that she had committed some unpardonable sin and that her soul would be lost. This patient remained perfectly well for more than two years. She then, during a very fatiguing journey, began to experience some of her old nervous symptoms, accompanied by suspension of the menstrual functions. A trip to Carlsbad and a series of mud baths intensified her troubles. A rough ocean voyage, returning home, completed the nervous break-down. She was in a most pitiable nervous condition when I saw her. All her old symptoms had returned. Twenty minutes in the ozone cage every day for ten days, and then every other day for two months, restored the menstrual function and cured her completely.

A gentleman who was treated locally by galvanism for a tubercular ulceration was put daily in the ozone cage and made to inhale deeply during the treatment. The ulceration healed and the patient gained ten pounds in weight. He has gained in strength and his ability to withstand fatigue has correspondingly increased. This case was referred to me by Dr. James Kerr of this city. Nearly all cases treated have been benefited where the constitution has been weakened by the fatiguing effects of prolonged acute disease, leaving the patient in a nervously prostrated condition, or where the demands of society have threatened the delicate constitution by sapping the little reserve force it possessed.

There is another class of patients who are treated in the static cage by another method. This I have called "The General Static Oscillation." Here

the cage and platform are connected to small Leyden jars; or, if I desire a very mild effect with increased number of oscillations, two small static induction coils are introduced into the circuit. When this is done the patient is subjected to an oscillation of several hundred thousand periods per second and representing a pressure of several thousand volts. The class of patients who are mostly benefited by this method of treatment are those suffering from the effects of a sedentary mode of life, who are dyspeptic and whose flesh is flabby when metabolism is sluggish. Ten, fifteen, or twenty minutes of general static oscillation produces a comfortable sense of warmth, accompanied by a gentle perspiration over the entire body.

It is found very useful with invalids who are unable to take gentle exercise, and in many cases in which the general system has suffered materially in consequence of a prolonged and painful local trouble, this treatment has been found to aid very much in the cure of the local lesion. When we stop to consider that the patient is placed in a circuit with an alternating current of very high potential and great frequency and that every tissue of the body is made to vibrate with the vibration of the machine—and that so gently as to be absolutely agreeable—it is very natural that we should expect powerful therapeutic and physiological effects. In suitable cases our expectations are usually verified when the patients stick long enough to the treatment. The great trouble is that patients who have tried nearly all other methods of treatment, and have suffered sometimes for years, imagine that when they take electrical treatment they ought to be benefited at once.

I am told by patients that they have been instructed by their family physician to come and try electricity for a week or so. Now, there are no very chronic cases with which I am familiar that can be much benefited by electrical treatment in one or two weeks. But they can often be benefited and frequently cured by treatment continued as long as treatment is necessary, which

may be several weeks or several months. The treatments are modified to suit each case; and there are many methods of localizing the current upon parts directly affected. Several cases of spinal irritation have been greatly relieved by localizing the brush discharge upon the tender parts and giving it general treatment with the oscillating current.

The static spark is administered by the brass ball electrode, the size of the ball being graduated by the local effects desired. A large ball gives a heavier spark than the smaller one. For this reason, as before stated, static electricity accumulates upon globular masses and the larger the mass the greater the accumulation. So when the discharging rods are separated and the brass balls brought near the body (the body of course representing the other pole of the battery) a disruptive discharge is the result; for the electrostatic discharge accumulates upon the ball until the tension is sufficient to overcome the intervening air space between the ball electrode and the patient, provided, of course, the space is not so great as to offer a resistance greater than the power of the machine. And the larger the electrode the greater will be the accumulation and the heavier the disruptive discharge. As air offers very high resistance to the current as it passes from pole to pole in the form of a disruptive discharge, it produces both heat and light, accompanied by a snapping sound, and strikes the patient with such force that it is impossible for a very nervous or very delicate subject to stand it until they have been gradually brought to it, beginning with mild treatments and increasing the severity as tolerance is established.

All who are familiar with static electricity are also familiar with the use of the static spark, which is undoubtedly the most powerful stimulant to muscle and nerve reaction that can be safely utilized. It seems to impart to the flabby muscle new life and by means of its high potential passes deeply into the tissues, modifying nutrition and thereby helping to restore healthy activity. Deep-seated pain, when not the result

of acute inflammation, is more quickly and thoroughly relieved by the static spark than by any other method known to me. Degenerated and paralyzed muscles are more quickly benefited and oftener restored by the static spark than by other means. Joint lesions and exostoses are often materially benefited by the heavy spark. Arthritis deformans has been benefited by the heavy spark when all other methods have failed.

Each and every method of applying the static current has its peculiar place in electrotherapy. Sometimes one method is better suited to a special case and sometimes another and very often two or three methods are used in the same case during one treatment.

Every new discovery in high tension currents seems to find an important place in medicine on account of some physical, physiological or therapeutical effects peculiar to this current. One of the latest marvels and one which has opened up a new field to the scientific worker is the discovery of the x rays by Professor Röntgen. And in this line of research the static machines are sharing the honors, at least equally, with the Ruhmkorff coils and other high tension apparatus. With my ma-

chines I have produced good x rays, as exhibited by the fluoroscope, and have taken some very good photographs of the bones of the hands and arms. Professor W. J. Herdman of the University of Michigan writes me that, with the proper tube, he is able to get better defining power from the static machine than from the Ruhmkorff coils. Such a statement from so eminent an authority is quite encouraging to those experimenting with the static machine. My experiments have been conducted by the aid of a single reflector tube and the work done has been quite good. Perhaps with a double reflector tube better work might be done with the static machine. These tubes are expensive and require careful handling to avoid breaking.

In conclusion, Mr. President, I claim that in order to use electricity to the best advantage in the treatment of disease, in the light of recent discoveries, in high tension currents, and the constant advance upon these lines, a good electrostatic machine is a necessity; and a perfect knowledge of its mechanism and how to use it and keep it in perfect order is equally important to obtain satisfactory results.

THE TREATMENT OF SYPHILIS.

By Henry Alfred Robbins, M. D.,

Washington, D. C.

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 14, 1896.

FOURTH PAPER.

THIS young colored man has just arrived at the voting age and he is a good object lesson for the study of syphilis. Not as classical a case as we presented to you the other day, where we could see the initial lesion, with the chain-like lymphatics leading up to a bubo above Poupart's ligament and the macular syphiloderm, extending over his abdomen and body. That was an exhibition of primary and secondary syphilis.

If this young man has syphilis, it probably dates back three or four years—that is, he exposed himself at the age

of puberty and that is very apt to be the case in any race all over the world. Dr. Arwine has failed to find any induration on the prepuce or glans penis and there is no enlargement of the glands in the inguinal region, but we find enlargement of the sub-maxillary and epitrochlear and there are mucous patches in his mouth. On these symptoms alone we have good reasons for forming a diagnosis of syphilis.

Now I call your attention to this big scaly-looking patch, that covers almost all of his right cheek; there is also a

smaller patch on the left side of the face and still another on the right ear. In my opinion it is a so-called tubercular syphilide. Had we not already made a diagnosis of syphilis, we might mistake it for lupus vulgaris. By the way, the name of tubercular was given to this syphiloderm long before the birth of Koch, who discovered the bacillus tuberculosis. Lupus is really the tubercular disease of the skin. The micro-organism is the same. It is identical in histological structure with that found in the internal and most vital organs.

Let us examine this large patch on the right cheek. You notice that around the edge there are groups of well marked so-called tubercles. The whole surface of the patch is scaly. You notice that in the center there is a tendency to heal. Here and there are rings of tubercles. This form of syphiloderm has been diagnosed to be ringworm. Some patients may tell you that it began as one. On account of the scaliness, it might be mistaken for psoriasis.

Now this young man, before he came to us, had been taking Fowler's solution of arsenic and he tells us that he has continued up drop by drop, until he can take twenty drops three times a day. Arsenic seems to be a cure-all with many physicians. I understand, however, that he was being treated for purpura hemorrhagica. This is the first time that I ever heard of its having been used in the treatment of that complicated and hard to define disease.

I had a patient, who had the stainings left by a polymorphous syphiloderm of the body and legs. This patient, while visiting friends in a western city, consulted a most eminent specialist, who diagnosed purpura hemorrhagica "an exceedingly interesting case, which he intended to publish, as he had only seen three cases just like it." The doctor stopped all treatment, excepting that of ergot, and gave full instructions as to diet, etc. Shortly after the patient's return to Washington, that most beautiful case of purpura had developed into a typical case of syphilitic lichen.

There is another variety of the so-called tubercular syphilide, which Hyde

calls the resolute. It occurs generally from the third to the sixth year of the disease. The face is a favorite seat for this form of syphiloderm. They look like exaggerated papules. They vary in size from that of a pea to a walnut. Occurring on the forehead, they give the lion-like expression (syphilitic leontiasis), which looks like leprosy. Syphilis resembles leprosy in more ways than one and many think that they are the same disease. Fitch of the Sandwich Islands, who has seen as much of leprosy as anyone, calls it the fourth stage of syphilis. This variety of syphiloderm (tubercular) may be mistaken for something else, as I will show by examples.

About three years ago, a gentleman called at my office, to consult me about his nose. It was not "a thing of beauty," which Keats says is "a joy forever." The fact is if he had waited a little longer, his nasal organ would not have had an abiding place on his face. The physician who had been attending him christened it "acne rosacea tuberosa." The bloom had gone when I first saw it, for the doctor had cut deep incisions on each side of the alae nasi down to the cartilage. I suppose he thought that a little depletion of the organ would do it good, and that any change would be an improvement. This was a case of tubercular syphiloderm or lupus. Syphilis will not lie, if the patient does. How the devil must laugh when he hoodwinks the doctor! Those who "laugh last, laugh the best." Get ready with your therapeutic test and the devil will cease to grin.

I ordered in this case applications to the nose of the inunctions of oleate of mercury, 10 percent., and gave internally iodide of potassium until he took thirty grains three times a day, when there were symptoms of coryza, showing that the patient had taken as much as he could stand. In less than two weeks the man had a most respectable nose. The hypertrophied condition was gone, but there were the scars on either side of the alae nasi; but the improvement was so great that he was willing to forgive everyone and after two years I was

rewarded with a recompense so infinitesimally small, that it would have been a waste of ink to have recorded it.

Some years ago, I was present at a clinic, when a middle-aged woman came in with a puffy nodulated-looking upper lip. She said that it had been called a cancer and that a surgeon wanted to cut it out. There were two present who consulted together and could not agree. One said it was lupus, the other said it was epithelioma, and, by the way, both surgeons were of foreign birth and education.

Upon opening the woman's mouth, a perforation was found on the hard palate which was caused by syphilis. In plain words, neither surgeon was right; it was a tubercular syphiloderm. When the patient was placed on specific treatment it was wonderful to notice the improvement. In two weeks the lip was perfectly normal.

We have portrayed the virtues of iodide of potassium. Now let us take up our imaginary easel and pallet, and paint the dangers which sometimes hover around that angel of cure. We will begin with this not inappropriate quotation,

"What's one man's poison, signor,
Is another's meat or drink."

This holds goods as far as the action of drugs is concerned. What cures one may kill another. Iodide of potassium is no exception to the rule. You all know that the bromides and iodides will cause an acne-form eruption, which is very distressing to the patient and annoying to the doctor, for he has to suspend treatment and lose valuable time. There may be other effects produced, which are exceedingly alarming, and it is well for us to be always on guard. That is what makes a good soldier and a good physician.

I remember that a few years ago, a comrade physician was called out of town. I was requested to call on a patient for him. I found a man who imagined himself to be a king, and he was revelling in fancied wealth. He was going to reform the world. In fact, his delusions were beautiful to him, but most distressing to his family. I was

"completely at sea," as it is said, and with nothing to anchor a diagnosis on. I finally, after much questioning, ascertained that he was taking from thirty to forty drops a day of a colorless liquid in milk. It was iodide of potassium. I discontinued it, and ordered big doses of sulphonal. Next morning he still had delusions, but not nearly so violent. I called in consultation Dr. Godding, superintendent of the Government Hospital for the Insane. He thought that perhaps the delusions might become fixed ideas and sent me one of his assistant physicians to remain with the patient one week. The delusions gradually disappeared and Dr. Godding and myself were rewarded with thanks only.

I find in one of my scrap books an article on the dangers of iodide of potassium, that ought to be in the mind of every practicing physician. I do not know who the author is, but I obtained it from the pages of *La Semaine Médicale*, several years ago. I give the entire article, as every sentence is pregnant with wisdom, which may bear fruit and come to you at a time when it will be most welcome.

"Although, in the vast majority of cases, potassium iodide is well tolerated or provokes merely symptoms of iodism, often disagreeable but not grave, it sometimes happens that, under its influence, terrible accidents occur which can even cause death.

"During the last three or four years grave intoxications from potassium iodide have been reported by various authors. These facts are at variance with the old idea which considered phenomena of iodism unimportant. The particular idiosyncrasy in patients by virtue of which potassium iodide can have evil consequences is met with—as intimated above—very rarely. However, it is of great practical interest; for, with a substance so frequently employed as potassium iodide, the physician is very apt to meet a patient presenting intolerance for this medicament.

"The questions now arise in one's mind—What are the grave accidents liable to be produced by potassium iodide? In what conditions and in consequence of

what doses do these accidents supervene? What are the means of preventing and combating them? The answers, briefly stated below, are such as the clinical facts thus far observed permit of giving to these important questions.

"The grave accidents provoked by iodine usually assume the form of edema of the glottis. It is well-known that, among the phenomena of iodism, serious infiltration of the eyelids is a quite frequent occurrence. It is therefore not astonishing that the serous imbibition observed in the eyelids can show itself also in the larynx. There obtains then edema of the glottis with its customary symptoms of suffocation. Of the cases of iodic edema of the glottis thus far observed, some have terminated fatally; others have recovered—either spontaneously, or in consequence of tracheotomy.

"In some patients the iodide intoxication manifests itself in the form of a generalized cutaneous eruption, resembling bullous pemphigus. This happens most frequently in subjects affected with nephritis. The latter disease therefore favors iodic intoxication. Acute iodic edema of the glottis having been observed in individuals presenting no abnormality that could explain its appearance, it must be admitted that this edema is often due to an idiosyncrasy, the nature of which we are as yet completely ignorant of.

"The doses of potassium iodide that bring on edema of the glottis are, in general, small ones. In the cases reported by Professor Fournier of Paris, they were of 1 gramme (15 grains), 50 centigrammes ($7\frac{1}{2}$ grains), and even 20 centigrammes (3 grains). A single dose of 0.2 gramme (3 grains) has produced edema of the glottis in a few hours.

"In regard to this subject a still more striking fact, recently reported by Dr. L. Kessler of Dorpat, might be mentioned; this author has seen the terrible symptoms of edema of the glottis supervene in a woman in whom he injected, per vaginam, a teaspoonful of a 1 to 3 solution of potassium iodide.

"As already mentioned, edema of the

glottis seems to follow most usually the use of small doses of potassium iodide—which fact agrees with what is known of the mild phenomena of iodism (coryza, frontal headache, conjunctivitis, etc.), which are often more intense when the potassium iodide is administered in small quantities than when the same medicament is given in large doses. Thus, in some patients with psoriasis, Dr. Haslund claims to have administered with impunity as much as 40 grammes (10 drachms) of potassium iodide daily; Dr. Gutteling, even 57 ($14\frac{1}{2}$ drachms).

"For a long time attempts have been made, with various means, to combat the customary accidents of iodism. It has been recommended to ingest the iodide with a large quantity of milk and to simultaneously administer certain medicaments, such as belladonna extract in daily doses of 0.1 gramme ($1\frac{1}{2}$ grains), potassium bromide (in doses double those of the iodide), etc.

"These means may be tried occasionally; but there is still another, lauded by Drs. Röhlmann and Malachowski of Breslau, as superior to all others; it is sodium bicarbonate. These authors based their idea of employing the latter medicament against the phenomena of iodism on the chemical consideration that alkalization of the blood ought to prevent the liberation of iodine from potassium iodide in the body.

"The practical application of this idea has fully confirmed the prophecies of Drs. Röhlmann and Malachowski. An experience of more than two years has convinced the latter investigators that the symptoms of iodism can be mitigated and even suppressed by administering, simultaneously with the iodide, 5 to 6 grammes (75 to 90 grains) of sodium bicarbonate daily in two doses."

From the facts thus briefly stated the following conclusions are drawn by the journal quoted:

"1. Before administering potassium iodide it is well to be assured of the integrity of the patient's renal filter. Of course, a lesion of the kidney is no absolute contra-indication to the use of

potassium iodide; for the good effects of this medicament in certain forms of nephritis (chronic interstitial nephritis) are well known. Potassium iodide may therefore be prescribed in these cases if necessary, but it should be given in small doses and its action watched.

"2. If the kidneys are sound the possibility of a special idiosyncrasy to the medicament must still be considered. For this reason it is advisable to administer the potassium iodide from the beginning with sodium bicarbonate and to give the former in the usual dose (not in small doses, which provoke edema of the glottis more readily than large ones); it is well also to watch the patient during the first few days so as to be able to take the necessary steps (tracheotomy, etc.) at the slightest indication of glottic edema.

"3. The sodium bicarbonate can be tried also against the usual symptoms of iodism which, although benign, are nevertheless annoying to the patients."

Alfred Stillé says: "In rare cases iodide of potassium produces an effect which is not so unusual after the prolonged administration of iodine—atrophy of the testicles."

On October 20, 1881, Dr. C. S. Bull read a paper "On the Lesions of the Orbital Walls and Contents Due to Syphilis" before the New York Academy of Medicine. The treatment recommended was mercury and iodide of potassium and in some cases it had been found necessary to reach very large doses of iodide of potassium before the symptoms of the disease began to yield.

In the discussion, Dr. J. W. S. Gouley said he had for ten years, and in accord-

ance with a suggestion which he received from Dr. Meredith Clymer, been using the iodide of sodium instead of the iodide of potassium, believing that it was the potassium and not the iodine which was the toxic agent. He had found that large doses of iodide of sodium were much better borne than were equally large doses of iodide of potassium; and besides, the sodium salts in the same quantity had no tendency to produce sclerosis of the kidneys. He condemned the excessively large doses of iodide of potassium, so frequently given, and believed that the physician who gave an ounce of the drug daily and continued it for weeks and months was guilty of malpractice. The syphilis might be cured, but the patient very likely would be killed by the chronic interstitial nephritis developed by this excessive and prolonged administration of the iodide of potassium.

I find in the *Medical Record* of November 28, 1896, the following: "Dr. Briquet advises the use of iodide of sodium when the potassium salt is not well borne. Ammonium iodide is often very serviceable in the tertiary stage." For years I have been prescribing iodide of sodium in place of iodide of potassium to certain patients who could not take the latter. I have also for a number of years always added the iodide of ammonium in my secondary and tertiary mixtures.

It is very important to remember not to prescribe sulphate of quinine to any patient who is taking potassium iodide, for mutual decomposition of the two medicines takes place and iodine is liberated, which may act poisonously.

ALCOHOL AS A DISINFECTANT.—Absolute alcohol is strongly recommended by Professor Fuerbringer and Dr. Freyan, of the Friedrichshain Municipal Hospital, as a disinfectant for the hands. They have tried its germicide action more than 200 times, and prefer it to other disinfectants for the hands. They first wash and brush the hands, and then rub each hand for about two minutes with a piece of gauze or flannel

dipped in the absolute alcohol, and finally rinse with a solution of carbolic acid or lysol, or of corrosive sublimate.

* * *

WARM SOLUTIONS OF COCAINE.—According to Da Costa, as quoted in the *Medical Review of Reviews*, a warm solution of cocaine produces a more rapid, more intense and more lasting effect with less danger.

A CASE OF PLACENTA PREVIA.

By John I. Pennington, M. D.,
Baltimore.

READ BEFORE THE BALTIMORE MEDICAL ASSOCIATION, NOVEMBER 9, 1896.

IN response to an invitation of Dr. Waters, a member of the Executive Committee, to read a paper, or report a case, before this Association, I will report a case of placenta previa. The subject being one of great importance, a concise review of the literature may be profitable as well as interesting; especially so since it may suggest points for discussion which might be passed unnoticed were I only to report the case.

Of the three varieties of attachment recognized, those of the lateral and partial occur more frequently than the central, the latter being extremely rare. The condition in either variety, however, fortunately is of rare occurrence.

Müller found 813 instances in 876,432 births, or not quite one case in a thousand. In the Emergency Hospital of New York between 1500 and 1600 women are reported to have been confined with not a single case of placenta previa. Lomer estimates the minimum frequency in Berlin at one in 723 births; six multiparae to one primipara.

The causes of placenta previa are unknown. Müller believes it to be due to an abortion begun at an early period, but arrested at the lower uterine segment, to which the villi attach themselves, and enable the ovum to continue its development.

The most important feature connected with placenta previa is the liability to hemorrhage. And this may occur at almost any time after the sixth month. The tables of Müller show that the first hemorrhage, in complete placenta previa, occurs most frequently between the twenty-eighth and the thirty-sixth week and in the incomplete form it takes place most commonly after the thirty-second week. It may not occur until the beginning of labor. The hemorrhage is usually sudden and without warning.

In the case that I shall report, it oc-

curred on two occasions in the night, while the patient was asleep.

The mortality of placenta previa according to Müller is from thirty-six to forty per cent. for the mother, and nearly two out of three children are born dead, and more than half of those born living die within the first ten days. Others report a much lower mortality. Thus Lomer, in his report of cases which occurred in the University Hospital for women, in Berlin, gives 101 of 9 individual cases with 7 deaths; Hofmeier reported 37 cases with 1 death; Behm, 35 cases with no maternal death. Thus in 178 cases occurring in the practice of 11 individuals, there were 8 deaths, a mortality of but 4.5 per cent. Lomer had no death in 16 cases.

Recent authorities all, I believe, agree that after the first hemorrhage occurs, it is important to deliver the child as soon as possible. Lusk, in his work in midwifery, says: "After the occurrence of the first hemorrhage after the seventh month of pregnancy, there is no safety for the mother so long as pregnancy lasts," and he further says: "the wisdom of delay as advised by most authorities is open to serious question." He thinks that the life of the child after the thirty-second week is less imperiled by the induction of premature labor, than by exposing it to the dangers of continued gestation. Lusk advises when the os is rigid and not dilated sufficiently to admit the finger, to pack the vagina with disks made of cotton dampened with a two per cent. solution of carbolic acid, with the aid of a Sims' speculum.

Lomer, in his valuable contribution following his experience with that of Behm and Hofmeier, who together had saved 92 out of 93 patients under their personal care, by means of the Braxton-Hicks method of bimanual version, lays down the following rules:

"1. Turn by the bimanual method as soon as possible.

"2. Pull down the leg and tampon the ruptured vessels of the placenta with it and the breech of the child.

"3. Do not extract the child then.

"4. Do away with the plug as much as possible. It favors infection and valuable time is lost by its application.

"5. Do not wait to turn until the cervix and os are sufficiently dilated to admit the hand.

"6. Turn as soon as you can pass two fingers through the cervix.

"7. Use chloroform freely.

"8. Rupture the membranes at the margin of the placenta. If this is not feasible, perforate the placenta.

"9. The next part of the treatment is expectant."

My case occurred on the 31st of July, last. Mrs. M., a young married woman who menstruated last on or about November 5, 1895. Shortly after became pregnant for the first time; nothing beyond the usual morning sickness occurred until May 3, 1896, when she had an acute attack of dysentery, which lasted three or four days. After her recovery from this attack, she remained quite well until the 28th of May. On the day before, when getting out of a car, she came suddenly down on the pavement, jarring herself considerably. This may account for what occurred the next morning.

About four o'clock she was aroused from her sleep by a hemorrhage, and upon examination found that she had lost quite a large quantity of blood. The hemorrhage continued in less quantities for three days.

She recovered from the attack, however, and went on to full time, when she again was taken with hemorrhage during the night while asleep. I was sent for and upon examination found her bleeding freely. The os was rigid and firm, dilatation had not commenced and she was not having labor pains; suspecting placenta previa, I returned to my office for my satchel which contained the necessary things for the treatment of the case.

I at first gave her a hot vaginal douche

of a strong solution of alum, which did no good. The bleeding continued as before. I then washed out the vagina with a 2 per cent. solution of creoline, introduced a Sims speculum and tamponed the vagina firmly with iodoform gauze. I placed a pad of the same over the vulva, and confined the whole with a T bandage. This I allowed to remain in for about six hours, when it was expelled by pains which in the meantime had come on. I again washed out the vagina with the creoline solution, because in addition to its antiseptic properties, it is somewhat of a lubricant and does not leave the vagina so dry and constricted as do other antiseptics. An examination then showed that the os was dilating and had thinned down considerably.

I sent for my neighbor Dr. Hemmeter, who very kindly came at once to my aid and upon consultation agreed that it was best to proceed to deliver as soon as possible. The patient was anesthetized with chloroform; I rapidly dilated the os and on passing my finger into the uterus, I found the placenta attached to the right side of the os, extending over and covering it, to the left side, from which it was easily detached. The woman being thoroughly under the influence of the anesthetic, I passed my finger into the uterus and found the head presenting in the occipito-posterior position.

Believing I could deliver more promptly and with greater safety to the child, should it be living, with the forceps than by version, I applied the forceps, which I fortunately succeeded in doing without much trouble or delay, I then brought down the head and thus for the time being tamponed effectually the bleeding vessels. The patient being in fairly good condition though she had lost a large quantity of blood, I then made haste slowly. My object now was to do as little violence as possible. I, however, delivered her in about a half hour. The child was dead.

The placenta upon examination was found adherent, and was removed with considerable difficulty. The uterus contracted promptly after the delivery.

From this time she lost very little blood. The perineum was slightly ruptured, which I repaired at once. In a few hours I left my patient resting fairly well, when we consider the ordeal through which she had passed.

The next morning I found her doing well, and she would have had a good recovery, I believe, but for an attack of acute rheumatism which occurred on the twelfth day and proved to be quite annoying for some little time and prolonged her illness far beyond the time at which she would have gotten up had this complication not supervened.

You will observe that I did not follow the rules laid down by Lomer. When I found that I had the head in the occipito-posterior position, it occurred to me that it would be difficult to turn without passing my hand into the uterus and grasping the foot and thus bringing it down. The time consumed in dilating the os sufficiently to admit the hand could be better utilized, in my judgment, by the application of the forceps, which could be done at an earlier period, and with less dilatation than necessary for the introduction of the hand. I applied the forceps, fortunately with little delay, brought down the head, and thus arrested the hemorrhage.

The points to which I wish to call special attention for discussion are: The propriety of using the tampon. The choice between version and delivery by the forceps and also (though I have not spoken of it before) the choice of the anesthetic. Some authorities object to the use of chloroform where the loss of blood has been great. We used chloroform in my case, and had no reason to regret doing so.

Society Reports.

BALTIMORE MEDICAL ASSOCIATION.

MEETING HELD NOVEMBER 9, 1896.

DR. WILMER BRINTON, President pro tem. Dr. J. G. Jeffers was unanimously elected to membership.

Dr. E. Dorsey Ellis exhibited some temperature charts representing eight

cases of typhoid fever treated with carbonate of guaiacol, all of whom recovered except one, a boy aged 11. In this case the temperature continued between 104° and 105° until death, which occurred on the eleventh day. Nervous symptoms developed, which resembled cerebro-spinal meningitis, but Dr. Ellis thinks that the case was one of enteric fever. The treatment employed was that known as the Woodbridge, the essential ingredient of which is carbonate of guaiacol. Turpentine in emulsion flavored with cinnamon and cloves was also administered in one case as circumstances demanded. He thinks that this treatment reduces the temperature, lessens the frequency of the pulse and makes it stronger, improves the mental condition and in general converts a serious case into a mild one. Other treatment was used as the symptoms required, but it was such as does not influence the disease itself.

Dr. E. G. Waters asked if alcohol was used. Yes. Was the urine examined?

Dr. Ellis: Not closely; in one case it revealed the odor of the antiseptics.

Dr. John D. Blake asked upon what theory is this treatment recommended?

Dr. Ellis: As intestinal antiseptic and it is said to counteract the typhoid poison.

Dr. Waters recently saw a case in which there was considerable albumen in the urine. Purgatives had been given followed by citrate of potassium. The next examination of the urine showed less albumen and subsequent examination revealed none at all. He regarded the congestion of the kidneys, upon which the albuminuria depended, as purely incidental.

Dr. John I. Pennington reported A CASE OF PLACENTA PREVIA. (See page 449.)

Dr. C. Urban Smith asked what forceps Dr. Pennington used.

Dr. Pennington: Simpson, with the Tarnier attachment.

Dr. J. T. King: Placenta previa is the most serious subject in obstetrics. Adherence of the placenta occurs in about one-third of such cases. Another

complication is the position of the cord, often eccentrically attached. The management of Dr. Pennington's case can not be questioned. Chloroform is always satisfactory in obstetrics.

Dr. Wilmer Brinton has seen fourteen cases of placenta previa. He always uses internal podalic version. Promptness of action is always necessary. He does not see why Dr. Pennington should have preferred forceps to version. Chloroform greatly relaxes the os. Hemorrhages come on very unexpectedly. He mentioned the case of a Hebrew woman who came into the hospital already infected. She lived one week after the birth of her children (twins), but died of septicemia. This is the only case of maternal mortality that he has ever seen. All his cases have been multiparous. Most of his cases have occurred at seven months of gestation. He believed in the induction of premature labor.

Dr. C. Urban Smith reported a case of NERVOUS DISEASE.

Nellie B., aged 7 years, well nourished, of average height, bright and rather above the average in intelligence, has been suffering with convulsive attacks since she was two years old. At first the convulsions were of the ordinary reflex character, such as result from digestive disturbances. They were not repeated for a period of two years. They were both tonic and clonic. Since that time she has had two or three a year, until within the past eighteen months, when they have become quite frequent, averaging one a day.

Since the child has gained in intelligence, the seizures have not been of a typical, convulsive order, but they seem to be more of a nervous twitching, without loss of consciousness, the little patient being able during the attacks to answer questions intelligently.

The paroxysm comes on suddenly; often while the child is playing on the street. She will then run rapidly to some one, in whose clothing she will bury her head deeply to hide her face while she twitches violently. Up to two years ago she would bark like a

dog during the attack. When asked why she acts in this manner and hides her face, she replies that she sees fearful-looking animals jumping at her, but no one has ever succeeded in getting her to describe them. These seizures last from ten minutes to half an hour. When the attack ceases, the child resumes her play without being in the least exhausted. If placed to sleep in a dark room, she will awaken with a paroxysm, calling out for some one to come to her.

Examinations of the heart, the lungs, the kidneys and the viscera have revealed nothing pathological. The patient has a good appetite, and (as already stated) she is well nourished. Her disposition is kind and gentle. There is no history of traumatism. No hereditary taint can be discovered. There are five or six brothers and sisters, all of whom are healthy. During infancy, two of the other children had convulsions, probably of the reflex type. One child had night terrors for a period of twelve months. Father and mother are not of a nervous temperament.

The case resembles one of *petit mal*, but the complete absence of loss of consciousness and the fact that she never complains of giddiness and never staggers, seem to negative this diagnosis. She never bites her tongue, does not froth at the mouth, and does not fall. She never sleeps after the attack.

The child is rather young for hysterical convulsions, or rather I should say that she was when the disease commenced. The fact of not losing consciousness, that of not sleeping after the seizures, and the entire want of other true epileptic features, make the case look like one of hysteria, but the child shows no other symptoms of that disease. Moreover, she has never suffered any acute pain, which is often the starting point of that affection.

She has been treated for hysteria by removing her from her home surroundings and sympathetic friends. The result rather increased than lessened the attacks.

She has taken all the antispasmodics and her system has been saturated with

the bromides with only a very slight amelioration of the paroxysms.

In conclusion, I might add that this child has been seen by at least a dozen members of the profession, and from what I can learn, only two have ventured to make a diagnosis; one, of *petit mal*; the other, of hysteria.

Dr. Waters asked if the patient had ever been treated for worms.

Dr. Smith: Yes, but none had ever been found.

Dr. Blake saw no resemblance between this case and *petit mal*, nor to any other form of epilepsy. It looks somewhat like catalepsy.

Dr. C. U. Smith: Rotch speaks of a *petit mal* somewhat like this.

Dr. E. D. Ellis: What brings on these attacks?

Dr. Smith: Nothing so far as can be ascertained. The patient has no involuntary discharges. Ophthalmoscopic examination and urinary analysis have revealed nothing. Diet has had no effect. Nothing relieves the child but chloroform. The iodides have been tried without effect. Attacks occur very often in the evening when the gas is lighted, but they may occur at any time.

The Association then adjourned.

EUGENE LEE CRUTCHFIELD, M. D.,
Recording and Reporting Secretary.

MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA.

MEETING HELD MARCH 11, 1897.

Dr. Hazen read a paper on A CASE OF CONGENITAL DISLOCATION OF BOTH KNEES. The case was that of a female child in whom the heads of the tibiae were dislocated forward, the legs making an acute angle with the thighs, allowing the toes to touch the abdomen. No patella could be found on either side. The parents would not consent to any line of treatment until during the third month when a rudimentary

patella was discovered in the right knee. After reducing the deformities a plaster of Paris bandage was applied. At the time of changing the bandage improvement was noted and passive motion practiced. The child is now fourteen months old, large and active and, with the exception of a slight lateral play of the joint, the knees are normal. It is *Dr. Hazen's* intention to apply an apparatus with a stop joint at the knee. In the published reports of thirty-five cases, twenty-five were forward dislocations; seventeen were double; in thirteen the patella was absent at birth, and in only two was there a double dislocation in an otherwise perfectly formed infant. Discussion by *Drs. Carr and Douglas*.

Dr. Stone read a paper on THE CAUSES AND TREATMENT OF CYSTITIS. *Dr. Stone* gave as causes, infectious diseases from the urethra or ureters; influence of neighboring organs; organic diseases of the bladder, and chemical irritation. In speaking of the treatment he urged careful examination of cases, and as many of the cases are due to organs outside of the bladder, as the kidneys, prostate and uterus, attention to these would indicate a rational line of treatment. The treatment of diseases of the bladder has been revolutionized since the advent of the cystoscope. *Dr. Stone* lays stress upon dilatation of the urethra in women and careful distention of the bladder. He rarely sees acute cystitis not due to direct infection, either gonorrheal or instrumental. The bladder appears to be peculiarly free from disease of its mucous lining from other causes. In chronic cases he advises distention and irrigation. The chief reason for cystotomy in these cases, unattended by foreign body, is to provide drainage. In acute cases he would insist upon rest and attention to diet; give diluents, possibly alkalies. If there is retention advise irrigation. Sedatives may be required to quiet pain and spasm. In chronic cases treat on general surgical principles. The bladder must be rendered aseptic, drained and carefully distended. Cystoscopy is a very difficult operation in the male.

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MARYLAND MEDICAL JOURNAL.

209 Park Ave., Baltimore, Md.

WASHINGTON OFFICE:

913 F Street, N. W.

BALTIMORE, APRIL 3, 1897.

NOT long ago the *Medical Record* had a very timely article on the penalties of irregular eating and spoke of the *How we Eat*. bad custom in so many cities of late dinners in the week with early dinners on Sunday and some holidays, thus throwing out of the gear the digestive organs, which recognize no day in the week and thrive best when meals are taken regularly.

The arbitrary division of the daily meals into three periods must have some physiological basis, for it is such a universal custom. The breakfast is from its name the first meal and the dinner varies in different places. The Germans use the word "Mittagessen," showing that their dinner is usually taken in the middle of the day.

On board of most large ocean steamers the number of meals is about double those on land. Between breakfast and luncheon there is usually a little bouillon served; between luncheon and dinner there is five o'clock tea; and after a late dinner there is served up to

ten o'clock a supper. These six meals a day are appreciated by the well on ship-board because there is little else to do and the effect of the mind on the stomach seems to stimulate the appetite, helped, of course, by the sea air and outdoor exercise.

On the Continent of Europe and in some other places the breakfast is very light, consisting of a small cup of black coffee, and the second breakfast is taken about noon. The countries where such a custom is followed maintain, with some show of right, that it is entirely unphysiological to take a hearty meal on arising. They say that during sleep the secretions are reduced to a minimum and the filling of the stomach with meats and other things throws too much of a burden on an organ which is not entirely awake. The very well and healthy can take a hearty breakfast, as the average American knows, but the slightest deviation from health is shown by the abhorrence of food in the early morning.

Of late an exchange has been advocating the "no-breakfast" cure, which is said to work wonders in many diseases, and which, though hard to follow at first, when once taken up, is carried out with ease. It is undoubtedly true that while the strong and healthy American can eat steak, eggs, potatoes and other things the minute he is awake in the morning, this does not make it a natural method to follow.

As a rule the American eats too much and perhaps the European drinks too much. The Englishman often does both. The body does not require much food unless there is hard manual labor and when too much is taken it is at first stored up and digestion and assimilation even in the most healthy go on slowly and there is a feeling of fulness.

If this state of affairs is kept up the excess is carried off by the bowels, but the over-worked organs soon rebel and many forms of disease which have too often been attributed to excessive drinking are indeed due to gormandizing so that, as a writer has said recently in this JOURNAL, the prohibitionist who is a glutton runs about as much risk of killing himself, although, of course, he does not lower his moral tone, as the drinker does.

Diet in health and disease requires much study and close observation and theorizing is not of as much use as this careful study and observation at the bedside of the sick and at the table of the strong and healthy.

If there is one person more than another whose just remuneration for services rendered should be secured in *Doctors' Bills*, some certain and sure way, it is the physician, who is often left out in the cold after long and faithful service.

The *Medical News* has shown what the physicians are trying to do in New York. They have had introduced the following bill:

"Every executor and administrator must proceed with diligence to pay the debts of the deceased according to the following order: (1) Debts entitled to a preference under the laws of the United States. (2) Taxes assessed on the property of the deceased previous to his death. (3) Debts of the deceased, because of services rendered and materials furnished by physicians, pharmacists, nurses and undertakers. (4) Judgments docketed and decrees entered against the deceased according to the priority thereof respectively. (5) All recognizances, bonds, sealed instruments, notes, bills and unliquidated demands and accounts. Preference shall not be given in the payment of a debt over other of the same class, except those specified in the fourth class. All debts specified in the third class shall become due upon the death of the deceased and shall be paid within ninety days thereafter."

Such a proposed legislation looks very plausible, but it is doubtful if such a law could be enforced. If a physician in attending on a serious and prolonged disease should say to the family that death might result and he wished to be secured against loss of his fees, the whole community would stamp him as a brutal and mercenary doctor. In Maryland the undertaker is the only one who is sure of his pay when the estate is at least large enough to pay that one item.

A responsible person, even up to the last hour of illness, is responsible, as a rule, for the attention received and after death the estate must be charged with the services rendered; but it must be remembered that the undertaker has nothing to do with the case until after death and hence his bill is not against the deceased, like the other bills, but against the person engaging him and to say that debts of the deceased ranked in the third class shall become due upon the death of the deceased would certainly shut out the undertaker.

The question is not an easy one to decide, but the truth is in uncertain cases the physician should be classed among the preferred creditors and his remuneration, however, should be guaranteed to him.

NOTWITHSTANDING the fact that there is much disagreeable and trying weather in Maryland in winter, it is by

Maryland as a Winter Resort. comparison much easier to bear and this State does present a much more equable temperature and a more enjoyable atmosphere than many regions in the northeast and on the great lakes.

As a consequence Maryland, and especially Baltimore, has grown of late to be somewhat of a winter resort. It is the largest city south of Philadelphia and offers many inducements as to natural beauty and educational facilities. Added to that, its amusements in the theaters, its good music, the fine art galleries and several large educational institutions all tend to make it a very attractive place for visitors seeking a change, far enough removed from the ocean to have the east winds tempered by the intervening land and hilly and sandy enough to dry up soon after a rain.

There are some months in the year, especially from the beginning of winter through to May, when there are many days in succession of almost ideal spring and when the invalid and even the well person whose strength is slightly below par, may enjoy the outdoor air and regain strength and health. Again, Baltimore is small and every attraction is within reach with little trouble or fatigue.

As was said, there are some days in winter when the weather is very trying and hard to bear, but there are many more days of almost balmy spring when other large cities have cold winds and snows almost unsupportable.

Physicians of Maryland, and especially of Baltimore, should inform themselves of the meteorological and climatological conditions of their own home and never fail to speak well to strangers of the desirable qualities of this region as a winter resort.

The bilious pessimist usually forgets the sunshine as soon as rain and dark days come, and croaks of the bad weather, but the honest man will by actual count find that there are many clear, beautiful days which promote life and health and make this region one to be recommended in the cold and changing season.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending March 27, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		21
Plithisis Pulmonalis.....		29
Measles.....	16	
Whooping Cough.....		
Pseudo-membranous } Croup and Diphtheria. }	25	5
Mumps.....		
Scarlet fever.....	23	
Varioloid.....		
Varicella.....	3	
Typhoid fever.....	2	3

The government of India has forbidden all pilgrimages from India to Mecca for a year.

Fairchild Brothers & Foster have taken action against a Newark druggist for substituting.

Dr. Peter D. Keyser, one of the oldest and most prominent oculists of the country, died at Philadelphia recently, aged 62.

An exchange says that Ex-Surgeon-General Hamilton proposes to try and have Surgeon-General Wyman deposed by President McKinley.

Dr. Henry B. Jacobs has taken the office formerly occupied by the late Dr. P. C. Williams at the corner of Cathedral and Howard Streets.

Dr. Nicholas Senn has purchased the enormous library of the late Du-Bois Reymond of Berlin and has presented it to the Newberry Library of Chicago.

Dr. H. A. Hare of Philadelphia has been appointed by Messrs. Parke, Davis & Co. of Detroit as Consulting Therapist to their pharmacological and bacteriological laboratories.

Invitations have been issued by the American Surgical Association and the Alumni Association of the Jefferson Medical College of Philadelphia to the unveiling of the statue of the late Samuel D. Gross, M. D., near the Army Medical Museum in Washington, on Wednesday, May 5, at 5 P. M.

Dr. J. M. Hundley has removed to 1009 Cathedral Street, near Eager. His office hours are until 10 A. M., 3 to 4 and 7 to 8 P. M. Telephone call 3582.

The next course of ten lectures instituted by the late Professor Thomas Dent Mütter, M. D., LL.D., on "Some Point or Points in Surgical Pathology," will be delivered in the winter of 1899-1900 before the College of Physicians of Philadelphia. The compensation is \$600. The appointment is open to the profession at large. Applications stating in full the subjects of proposed lectures must be made before October 1, 1897, to Committee on Mütter Museum, John H. Brinton, M. D., Chairman, northeast corner Thirteenth and Locust Streets, Philadelphia, Pa.

The Fifty-third Annual Meeting of the American Medico-Psychological Association will be held at the Hall of the Medical and Chirurgical Faculty, 847 N. Eutaw Street, Baltimore, on May 11, 12, 13 and 14, 1897, at 10 A. M. The following papers are announced: The President's Address, Theophilus O. Powell, Milledgeville; Annual Address, The Relations of Neurology to Psychiatry, B. Sachs, New York; The Medical and Material Aspects of Industrial Employments for the Insane, G. Alder Blumer, Utica; The Constructive Forces, Ralph L. Parsons, Greenmont; Insanity Following Surgical Operations, Richard Dewey, Chicago; General Questions of Auto-infection, Charles K. Clarke, Kingston; The Historical Development of the Conception of Auto-intoxication, August Hoch, Waverly; The rôle of Auto-infection in Melancholia and Epilepsy, Charles G. Hill, Baltimore; Clinical Aspects of Auto-intoxication, Arthur W. Hurd, Buffalo; Another Chapter in the History of the Jurisprudence of Insanity, Daniel Clark, Toronto; Nursing in State Hospitals and Training of Nurses, Peter M. Wise, Albany; The Development of the Higher Brain Centers, Stewart Paton, Baltimore; The Private Hospital for the Insane, Carlos F. MacDonald, Pleasantville; An Unusual Case of Meningitis, C. B. Burr, Flint; Commitment of the Insane, Edward N. Brush, Towson; Sporadic Cretinism in the Negro, Henry J. Berkley, Baltimore; Hospital Records, R. L. Parsons, Greenmont; The Genesis of a Delusion, A. B. Richardson, Columbus; Insanity Occurring in Cases of Exophthalmic Goiter, H. B. Jacobs, Baltimore.

Book Reviews.

ANOMALIES AND CURIOSITIES OF MEDICINE: Being an Encyclopedic Collection of Rare and Extraordinary Cases, and of the Most Striking Instances of Abnormality in all Branches of Medicine and Surgery, derived from an Exhaustive Research of Medical Literature from its Origin to the Present Day, Abstracted, Classified, Annotated and Indexed. By George M. Gould, A. M., M. D., and Walter L. Pyle, A. M., M. D. Imperial Octavo, 968 pages, with 295 Illustrations in the Text and 12 Half-tone and Colored Plates. Philadelphia: W. B. Saunders, 925 Walnut Street. 1897. Prices: Cloth, \$6.00 net; Half Morocco, \$7.00, net. Sold only by subscription.

This is one of the most remarkable works in medical science that has ever been published. The list of anomalies and curiosities has been collected and arranged only after the most penetrating and exhaustive searching on the part of the two authors. It would be impossible to notice critically this enormous work in a few words. It is not only a catalogue of freaks and deformities so well-known to museums and other such places, but it is a record of abnormal proceedings, of physiological acts abnormally executed. Of course, teratology claims a large part of the work.

The chapter headings are: Genetic Anomalies; Prenatal Anomalies; Obstetric Anomalies; Prolificity; Major Terata; Minor Terata; Anomalies of Stature, Size and Development; Longevity; Physiological and Functional Anomalies; Surgical Anomalies of the Head and Neck; of the Extremities; of the Thorax and Abdomen; of the Genito-Urinary System; Miscellaneous Surgical Anomalies; Anomalous Types and Instances of Disease; Anomalies of Skin Diseases; Anomalous Nervous and Mental Diseases; Historical Epidemics.

The index is very full and complete. The publisher's work is all that could be desired.

DR. JOHN C. HEMMETER of Baltimore, who makes diseases of the stomach and intestines a specialty and whose work at the Baltimore Medical College has given such satisfaction, is about to bring out a book on Diseases of the Stomach. It will be published by P. Blakiston, Son & Co. of Philadelphia.

THE *Texas Medical Practitioner* is the new name of the old *Texas Health Journal*. Dr. A. M. Elmon is the editor.

Current Editorial Comment.

THE MEDICAL DIRECTOR.

Medical Examiner.

THE idea seems to prevail that the post of Medical Director at the home office of an insurance company is about as desirable as a surgeon-generalship at the seat of government, and that to represent companies in important cities, or within a certain territory, is equally desirable.

INSTRUCTION IN ETHICS.

Medical News.

TO THOSE students who cannot be dissuaded from entering an over-crowded profession, should be given, some time during their course of study, a series of plain, practical talks, by some member or members of the faculty, which will open their eyes to things which books and laboratories cannot teach, a course of future conduct which will tend to make them respected, self-respecting and, haply, materially successful physicians.

FOREIGN PRODUCTS ADVERTISED.

"An American Manufacturer" in Journal of A. M. A.

FOR the life of me I can not see how some of our practitioners can legitimately maintain the position which they occupy. They will refuse to prescribe "mercauro" for example because it is proprietary, notwithstanding its formula was long ago published in the *Journal*, while on the other hand they will not only prescribe, but will write about and talk about foreign products which are not only proprietary in the fullest and widest acceptance of the term, but are also patented, yes, absolutely patented! This matter strikes me as being an injustice to American progress in chemistry and therapeutics. I can not see why a foreign product should be received with open arms and taken into the ethical fold, when everything in connection with that product is doubly at odds with the code of ethics. This is really a serious subject and is getting more and more serious. The foreigners have a big advantage over us under the existing circumstances, for the manufacturers go ahead and make their own statements, attribute them to some doctor with a foreign name, resort to all sorts of measures to have the articles quoted, and I am sorry to say that they meet with success.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY. Meets at call of President.
- CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. J. B. SCHWATKA, M. D., President. S. T. ROEDER, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President, dent. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. ARTHUR SNYDER M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. T. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 1st Thursday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. HENRY L. HAYES, M. D., Recording Secretary.
- OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY OF WASHINGTON. Meets monthly at members' offices. President, S. O. RICHNEY, M. D. Secretary, W. K. BUTLER, M. D.
- WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly. 1st Saturday Evenings. MRS. EMILY L. SHERWOOD, President; DR. D. S. LAMB, 1st Vice-President. MISS NETTIE L. WHITE, 2nd Vice-President. MRS. MARY F. CASE, Secretary. MISS MINNIE E. HEIBERGER, Treasurer.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY. Meets 1st Monday in each month. N. P. BARNES, M. D., President. F. W. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

DANIEL'S PASSIFLORA INCARNATA.—This well-known remedy has been on the market for a number of years and has earned a degree of popularity seldom attained by other like preparations, due solely to the fact that it possesses real merit and has ever been maintained up to the highest standard of excellence. Many eminent physicians have highly endorsed this preparation and both constantly use and prescribe it in all sections of the country. It is especially commendable in cases of spasms, tetanus and all nervous diseases and has been prescribed with great success in cases of delirium tremens and in typhoid and other fevers. Write for particulars to the well-known and thoroughly reliable firm of Jno. B. Daniel, 34 Wall Street, Atlanta, Ga.

WHOOPIING COUGH.—Last winter my little six year old daughter was taken with above disease which was epidemic in our town. I tried faithfully and religiously the old and recognized treatment, exhibiting bromides of sodium and potassium, bromoform, belladonna and antipyrine in succession, but with no success. The paroxysms did not abate in frequency nor severity, but if anything increased, and finally, after three weeks' sickness with no relief, the little patient's condition was precarious. Pulmonary edema was developing from failure of the right side of the heart and I was at my wit's end to know what to do. By chance I was urged to try Vapo-Cresolene, prepared and sold by Messrs. Schieffelin & Company of New York City. I caught the first train going to St. Paul, as time was precious, and procured at a wholesale house a supply. Gentlemen of the profession, the result of the trial was almost miraculous. It is a dark fluid smelling strongly of creosote, and is exhibited by vaporizing it by a little lamp that accompanies the medicine. Let me say that within twelve hours after we first used it, my child breathed easier, the paroxysms abated in length and severity and in two days she was out of danger and her recovery was rapid and complete. In ten years of hospital and private practice I have never seen anything like it. "It cures while the patient sleeps."—O. C. TABOR, M. D., Sec. U. S. Pension Ex. Board, Princeton, Minn., in *Daily Lancet*, February 2, 1897.

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Original Articles.

DR. RICHARD SPRIGG STEUART AND THE MARYLAND HOSPITAL FOR THE INSANE.

By James A. Steuart, M. D.,
Baltimore.

DURING the session of the Legislature of 1827-1828, Dr. Richard S. Steuart (then in the active practice of his profession in Baltimore and deeply interested in the cause of the insane) obtained, with the aid of his friends, the passage of the law which established the "Maryland Hospital for the Insane." Prior to this period, the Maryland Hospital, established in 1797, had been a general hospital, including the sick as well as the insane, and had been leased by the State to Dr. John Mackenzie and others, who carried it on as a private enterprise and under contract with the U. S. Government received sailors of the U. S. Navy and general marine.

At the first meeting, in April, 1828, of the Board of Visitors (which board consisted of members from Baltimore and the various counties of the State, named in the act dedicating the hospital entirely to the treatment of the insane), Dr. Richard S. Steuart was elected president of the board and medical superintendent of the hospital. His early experiences in this capacity were most interesting, and if they had been written up would be equal to the famous stories of Warren's "Diary of a Late Physician." He found insane men and women chained to the floor and resting only upon filthy straw, who had not been out of their cells for years. This

he immediately undertook to reform and striking off the chains from the limbs of these wretched creatures, he inaugurated a more humane treatment, which was the beginning of a new era in the care of the insane in Maryland. He obtained the services of the Sisters of Charity and appointed as his assistant and resident physician the late Dr. William Fisher.

Dr. Fisher was succeeded in 1838 by William H. Stokes, afterwards and for many years superintendent of the Mount Hope Retreat, Hospital for the Insane. During the first ten years of his service, finding the buildings already too small and ill adapted for the treatment of the insane, Dr. Steuart again applied to the Legislature for the means to enlarge and improve the hospital and, after a severe and exhausting struggle, obtained from the State a small appropriation with which the west wing was erected, thereby doubling the capacity of the house and relieving the over-crowded condition of the old east wing and center building. During several years of this early period, Dr. Steuart carried the expenses of the institution upon his own shoulders, becoming personally responsible for the debts of the hospital, trusting to the Legislature for reimbursement, a large part of which he never received.

About the year 1850, Dr. Steuart,

with the consent and coöperation of the Board of Visitors, commenced his plans for the building of a new insane asylum, and went before the Legislature with his petition for the means to purchase a suitable site for the erection of an institution adequate to the increasing demands of the period. He spent one year in examining every possibly available locality, and finally decided upon the beautiful and most appropriate spot where now stands the Maryland Hospital for the Insane at Spring Grove, in Baltimore County, the original name of the place. But here arose a difficulty. The State had appropriated the sum of only \$5000 for the purchase of a site and this chosen site (a farm of 123 acres, overlooking the city and harbor of Baltimore and the surrounding country), could not be obtained for less than \$25,000. Nothing daunted, Dr. Steuart closed the bargain, paid the \$5000 on account of the purchase money and undertook to raise the balance by private subscription. He headed the paper with his own name and \$1000 and from personal friends during the ensuing six months obtained this balance in sums ranging from \$1000 down to \$25. This \$20,000 was presented to the State as an offering to the cause of the insane.

During the following winter, Dr. Steuart again undertook to obtain from the Legislature the means to erect the new insane asylum at Spring Grove. This proved more difficult of accomplishment than any of his previous undertakings. What between the circumscribed views of the average legislator and the obstructive tactics of a corrupt political lobby, he had well-nigh despaired of success when he called to his aid that distinguished philanthropist, Miss Dorothea Dix of Massachusetts. Most cordially did she respond to this call, for the cause of the insane had been her life work, as it had also been Dr. Steuart's. She established herself in Annapolis and worked night and day until the object was accomplished and the appropriation obtained. The Act included the appointment of a commission of five to build the hospital and included Dr. Richard S. Steuart of Balti-

more, General Benjamin Howard of Baltimore, Dr. Washington Duvall of Montgomery County, Col. Hanson of Frederick and Dr. Humphries of the Eastern Shore of Maryland.

The actual work was begun during the year 1853 and had progressed nearly to completion when, in 1861, upon the breaking out of the war, all work was suspended and so remained until 1866, when building operations were resumed and carried on to completion in 1872. As originally designed, as soon as the new hospital was furnished and ready for occupancy, the patients were all transferred thereto and Dr. Steuart took charge as president of the board and medical superintendent, with his cousin, Dr. Wm. F. Steuart, as resident physician.

It should be mentioned, that the original Board of Visitors was made, by the Act creating them, perpetual, that is, having the right to fill vacancies in their board whenever such occurred, and Dr. Steuart continued uninterruptedly to act as president of the board and medical superintendent from the time of the creation of the board up to 1862, when owing to the political feeling created by the war, then going on, a number of the members of the board, including Dr. Steuart, were suspended because they declined to take the oath presented to them by the Federal authorities then in power in Maryland.

Such members of the board as could and did take the oath were at that period continued in charge of the old Hospital on Broadway, with Dr. John Fonerden as medical superintendent and Mr. Enoch Pratt as president of the board. Dr. Fonerden had been the assistant and resident physician from the time of the resignation of Dr. Wm. H. Stokes to take charge of the then new Mount Hope Retreat, established by the Sisters of Charity when they left the Maryland Hospital. Dr. Fonerden's incumbency covered a period of some twenty years.

As soon as the war was over and the Democratic party returned to power in the State, the old board was reinstated and Dr. Steuart resumed his office

as president and medical superintendent. He occupied this position, at the time of the removal to the new Hospital and until within a few weeks of his death, which occurred July 13, 1876. He, therefore, served the State—deducting the five years of the war—continuously for forty-three years. The first years of his service were without compensation of any kind. Later, he accepted a small salary and only from the time of his taking charge of the new hospital did he receive a salary which compensated him for his time and services.

Dr. Steuart was an enthusiast in his work, and gave the best efforts of his life to the cause of the insane. The reforms in the management and treatment of the insane which he instituted and carried out were far ahead of their day and have continued to bear fruit to the present time.

The humane and scientific treatment inaugurated under his management, fifty years ago, will compare favorably with that of the present day in any hospital or in any country.

Dr. Steuart was a native of Maryland and both his father and grandfather were physicians. He was born in 1797, educated at St. Mary's College, graduated as a physician from the University of Maryland in 1822 and died in 1876, at the age of 79 years, after a long and useful life.

Before closing this brief sketch, it should be mentioned that it was through Dr. Steuart's influence with Mr. Johns Hopkins—for many years a member of the Board of Visitors, as well as a personal friend of Dr. Steuart—that the present site of the Johns Hopkins Hospital was chosen for the location of that magnificent gift to Baltimore and the State of Maryland.

THE TREATMENT OF SYPHILIS.

By Henry Alfred Robbins, M. D.,

Washington, D. C.

CLINICAL LECTURE DELIVERED AT THE SOUTH WASHINGTON (D. C.) FREE DISPENSARY, DECEMBER 21, 1896.

FIFTH PAPER.

I NOTICED as I passed through the reception room, that the patients there assembled were looking at this 20 year old full-blooded negro boy askance. Are you afraid of smallpox?

Hutchinson says "the simulation of the variolous eruption by syphilis is the most marked example of 'syphilitic imitation.' The papules are elevated, shotty to the finger, have depressed centers, affect the same regions as variola and resemble it so absolutely that nothing but the history of the case helps to a correct opinion." Is this not a good pen picture of what you now see?

You notice that this papular eruption is all over his forehead and face, then it goes down his neck, over his chest and abdomen. It coincides in every particular to that of smallpox. I was in Paris during an epidemic of this loathsome disease and visited the hospitals set

apart for the treatment of the pestilential patients and saw it in all its stages. The papules are umbilicated, as you see, and some of them show evidences of pus formation.

The boy denies ever having had syphilis. That statement is worth nothing. Let us examine him carefully. Now, it is just as I thought. Dr. Arwine has found a cartilage-like induration on his prepuce and there is enlargement of the lymphatic glands above Poupart's ligament. He is now feeling the patient's right arm, just above the bended elbow, and like Archimedes of old, he cries "Eureka," for he has found them. The epitrochlear glands are rolling under his fingers.

The boy has none of the constitutional symptoms of smallpox; no history of severe pains in the back, no his-

tory of fever which subsided on the breaking out of the eruption. We would expect, anyhow, that he would have head and joint aches, but he says he has not. Look into his mouth and you see several opaline mucous patches. The boy has a papular and also a papulo-pustular syphiloderm.

Two summers ago I went with my family to a sea-side resort on the coast of New Jersey. On returning from an excursion one evening we found our hotel quarantined. The mayor of the village came up and informed us that a doctor had reported to the health officer that we had a servant of the hotel who had the smallpox. It had been proven to be false and the mayor allowed us to pass and then he removed the red flags that were danger signals. I took in my arms a beautiful little girl and carried her to the hotel. There we met our landlord, who told us what had happened. It appears that there was a colored girl employed in the kitchen who broke out with an eruption.

A New York City doctor (who, not satisfied with a lucrative practice at home, practiced also at this summer resort) was called in and pronounced the case to be one of confluent smallpox. He also reported that two of the guests had caught the disease from her, naming the little girl I had in my arms and her mother, and he commanded our host to give warning to his guests. This was news to me, as I thought that the child had simply two or three impetigo pustules on the face and the mother I supposed had that not very aristocratic looking disease called *acne vulgaris*. The colored girl had vanished, but she was traced to Philadelphia and was found in a dispensary service. The diagnosis was asked for and it was *papulo-pustular syphilis*.

The inmates of the hotel were in a high degree of excitement and to the best of my ability I explained to them the difference between smallpox and syphilis. The next day the State health officer from Trenton came down, bringing with him a doctor from Red Bank and one from Asbury Park and several more. Conspicuous for his ab-

sence was the New York doctor. The result of the examination was that all sustained the diagnosis made in Philadelphia.

The doctor who started this false report stands well in New York and he should not be held responsible, but not so those professors who graduated him as a physician without having given him any instruction on that most important of all diseases—syphilis. Imagine the ruin that this man's ignorance nearly accomplished. If the impression had gotten abroad that the smallpox existed on the Jersey Coast, it would have emptied every hotel from Long Branch to Cape May.

I have praised the virtues of iodide of potassium and have described her angelic form, with arms and wings extended hovering over the patient. In our last lecture I took the same "goddess" and drew a picture of her in quite another attitude. I told how she could kill as well as cure. Now let us take up that Roman god — Mercurius. We have described him as being even superior in glory to iodide of potassium. We hope to make him mentally visible to you. His name "mercari" (to traffic) indicates that the first idea of his character was that of the patron of merchandise. He had a great many tasks to perform and, among others, he was employed to lead the ghosts of the dead to the other world, to infuse dreams into the brain and to cause or dispel slumber by the passes of his magic wand.

He is generally represented as a naked youth, displaying in his limbs the beauty of the boy mingled with the full vigor of manhood, holding a purse in his right hand and his winged caduceus in his left, wearing one pair of wings on his sandals and another on his hat and bending forward on tip-toe, as if speeding over sea and land on some important errand. In his left hand he carried his badge of authority. This caduceus, as it was called, was a rod entwisted by two serpents and generally surmounted with a pair of wings. The rod represented power, the serpents wisdom and the wings diligence and activity. Wonderful properties were as-

cribed to it by the poets; as laying persons to sleep, raising the dead, etc.

The drug mercury is named after this fascinating god. If you take the trouble to study its history you will find that it has killed more than it has cured. Why? In olden times all venereal troubles were little understood and gonorrhea, syphilis and chancroidal inflammations were all supposed to be of the same origin and mercury was given to all. Now mercury has killed and will continue to kill until it is known when to, and when not to, give it. It will cure syphilis and it will cause the most disastrous effects, given to patients who have not the disease. Years ago there was an almost universal protest against its employment.

In 1822, in Sweden, by Royal command, reports were annually made from civil and military hospitals, as to the effects of treatment with and without mercury. At this time in Sweden and Denmark, venereal diseases were treated systematically by diet alone and to this plan the name "*cura famis*" has been given. It consisted in submitting the patient to a very severe regimen and the administration of the extracts of bark and conium as medicines. The regimen of the patient during the first six weeks consisted of five ounces of roast meat without gravy or condiment of any kind and six ounces of white bread soaked in water; this quantity was divided into two or three portions, but it was all that was allowed for one day. The extract of conium was given in doses of four or six grains night and morning. At the end of six weeks the patient resumed his ordinary diet.

All kinds of venereal diseases were treated on this plan, whether recent or inveterate; but it was considered particularly indicated where mercury had been used without success, or where syphilis existed in a gouty or scrofulous constitution. A decoction of the root of the "*smilax china*" was given for drink to the extent of two pints a day (*Exposé de la Méthode pour guérir les Maladies Venériennes dégénérées*, par Osbeck; Stockholm, 1811).

The commission appointed to exam-

ine into the merits of this plan of treatment decided that the cure was due to the regimen alone and the medical treatment had little or no effect. The Swedish physicians restricted the *cura famis* to cases of constitutional, inveterate, or protracted syphilis. In primary syphilis it was considered injurious and was supposed to favor the development of constitutional disease by rendering absorption more active. Reports very unfavorable to the treatment of syphilis with mercury also came from France and Germany.

I quote the following from an old edition of "Atkins' Practice of Medicine, 1868." "It is extremely interesting and gratifying to be able to say that long before any reports were made the surgeons of the British army perceived the ravages of the combined poisons of mercury and syphilis and had the boldness to declare themselves against the system of treatment of syphilis with mercury and to introduce the milder measures of non-mercurial treatment.

"The inquiry, begun in 1816 by those military surgeons, requires to be reinvestigated with all the present advanced knowledge of the nature of the disease which we now possess. With a better prospect of detecting the fallacies which surrounded the investigations under the simple treatment of those eminent men, there can be no doubt that mixed cases of soft, as well of indurated, chancres and specific or syphilitic sores, were allowed spontaneously, as it were, to develop their distinctive characters. No confidence can now be placed in the results derived from clinical observation, where the cure of soft, suppurating and mixed sores, gonorrhea, vegetations, suppurating buboes, are all indiscriminately given as evidences of the cure of syphilis.

"Even those who believe most fully in its virtues acknowledged that in primary affections, as when given in the treatment of the local sore, its administration will not prevent the occurrence of constitutional symptoms; nevertheless the value of mercury in the case of

the induration of the true infecting chancre is now fully recognized."

We must be good diagnosticians. You notice how carefully we conduct our examinations, and when there is any doubt at all, we do not begin with any form of mercurial treatment.

I will give you an example of what harm mercury is capable of when given to a patient who has not syphilis. Just after the close of our civil war, I had an officer friend, who consulted a most noted ex-army surgeon for a suspicious sore. The surgeon immediately gave him mercury. Soon he was covered with a papular eruption, which convinced the doctor of the correctness of his diagnosis. The patient went from bad to worse every day and trembled like an aspen leaf with paralysis agitans. He was an aged, wretched looking object. One day he made me a friendly visit. I examined him carefully, and told him that I was of the opinion that he never had syphilis, and that the eruption and the shaking palsy he had were both the effect of mercury. I advised him to go to New York and consult my friend Dr. F. J. Bumstead, who was then in his prime, and the leading syphilographer in America. The patient did so, and I had the satisfaction of having the doctor agree with me in every particular. Mercury was stopped and tonics were given, and in a very brief space of time the man was as well as he ever was. He would have died if the mercurial treatment had been continued, for it was a slow but sure poison to him, because he never had syphilis. You have seen the magical effects of our treatment. We believe in the judicious use of mercury, but it is a two-edged sword and should not be placed in the hands of a fool.

Let us return to the treatment of syphilis. We have already given you our treatment of the first year and a half of syphilis by various forms of the internal administration, and subsequently the "mixed treatment." We gave our reasons for every procedure, and we are convinced if this method is judiciously carried out, that in the majority of your patients you

can assure them that you can cure them. You can not abort the secondary stage, but you can prevent its running on to the so-called tertiary stage, which is a sequela of the primary and secondary.

We will now call your attention to the treatment by mercurial fumigation, or rather the mercurial vapor bath, and we naturally think of the man who had the best success with this plan of treatment, and who has written most clearly on the subject, and that is Mr. Langston Parker, F. R. C. S., of Birmingham, England. I will give his directions for the mercurial vapor bath, as well as his own views as to its superiority over all other methods.

"The patient is placed on a chair, and covered with an oilcloth lined with flannel, which is supported by a proper framework. Under the chair are placed a copper bath, containing from half a pint to a pint of water, and a tinued iron plate, on which is put from one to three drachms of the bisulphuret of mercury, or the same quantity of the grey oxide, or the binocide, or other mercurial preparation; under each of these, a spirit lamp. The patient is thus exposed to the influence of three agents, heated air, common steam, and the vapor of mercury, which is thus applied to the whole surface of the body in a moist state. After the patient has remained in the bath from five to ten minutes, perspiration generally commences and by the end of twenty or thirty minutes, beyond which I do not prolong the bath, it is generally free. The lamps are now removed, and the temperature gradually allowed to sink; when the patient has become moderately cool, the coverings are removed and the body rubbed dry; he is then allowed to rest in an arm-chair for a short time, during which he drinks a cup of warm decoction of guaiacum or sarsaparilla.

"The apparatus requires some modification and arrangement to suit particular cases. When it is wanted to induce a quick and decided action, the whole power of the bath should be brought into operation, and the largest quantity of mercury should be employed. In rapidly spreading ulcers,

this is required. Again, in chronic skin or throat diseases, where a powerful action would rather oppress the patient than cure his disease, the power of the bath should be modified, and not so great a heat or so much mercury employed. This is accomplished by using smaller spirit lamps, or, when perspiration has once been induced, by the removal of one lamp, leaving the patient thus exposed for a time to the mercurial vapor alone. This should be done when the patient has been broken down by long-continued disease, in bad or weak subjects, when a more prolonged action is required to eradicate the more deep-seated effects of the venereal poison, as in diseases of the bones, or indurations on the penis. Each particular case would require a greater or less modification of this kind. The form of mercurial employed is also of consequence. In skin diseases, the bisulphuret is to be preferred; in diseases of the throat or nose, the grey oxide, binocide, or calomel, is better, because the patient can bear the head immersed without sneezing or coughing, which he can not do when the bisulphuret is used.

"I am in the habit of using four mercurial preparations for the bath—the bisulphuret of mercury, the binocide of mercury, the grey or black oxide, and the iodide; to this list Mr. Henry Lee has lately added the chloride of mercury. These may be used singly, or combined in different ways, to suit the peculiarities or emergencies of each particular case. The first of these preparations is milder than the last, and from half a drachm to four drachms may be used with perfect safety. In one case half an ounce was used for each bath, and two applications were sufficient to bring the system fully under the influence of the remedy. The iodide must be used in smaller quantities; nearly the whole of this preparation is rapidly converted into vapor, and, unlike all the other preparations, leaves scarcely any ash behind it. From five grains to half a drachm of the iodide is sufficient, and it is better to use it in small quantities, mixed with a larger quantity of either

of the other preparations. When calomel is used in ordinary cases, from ten to twenty grains may be employed for each bath. In affections of the testes (sarcocele) and of the bones (the various forms of ostitis or periostitis), a combination of a scruple of the iodide, and one or two drachms of the bisulphuret or binocide, would be a proper form. For local application to the cavities of the nose or mouth, calomel or the grey oxide of mercury are the best preparations. I have known the vapor of the biniodide of mercury used. A surgeon, by mistake, employed the biniodide instead of the iodide, in a most formidable case of secondary syphilitic ulcerations. It produced violent diarrhea with bloody stools, but it cured the disease. I have never used this salt by the way of fumigation, on account of its irritating properties.

"A short preparatory treatment should be adopted before using the baths. The bowels should be kept free, and the use of wine, spirits, etc., prohibited. The patient should be free from fever, the tongue clean, and the freedom from organic diseases, such as those of the heart and lungs, more particularly, should be ascertained. Should such or other complications be present, they might require modifications of treatment, but would not prevent its employment, as this is not only the most certain, but the safest way of curing most forms of constitutional syphilis.

"This plan of treatment does not commonly require that the patient should forego his ordinary occupations of business, or that he should be confined to the house during its use. It must be admitted that its effects would be accelerated by confinement to bed, or to a couch in a moderately warm room; but this is by no means imperative, and I have very rarely advised it, except in such cases where exposure or exercise would be positively mischievous, as in the cases of sloughing, or rapidly spreading ulcers in the throat or elsewhere."

"The time occupied in the cure of venereal diseases by the mercurial vapor

bath is vastly less than that consumed by any other kind of treatment; its effects are commonly immediate, one full bath very frequently making an impression on the disease. Where the hair has been falling rapidly, one bath has arrested this; ulcers which have been rapidly spreading have been rendered stationary by one bath. After two or three baths, the improvement is in most instances marked; and the cure is effected in one-fourth, or even one-sixth, of the time required for the success of ordinary treatments. The nature of the cases determines the time occupied in the cure. In superficial skin diseases, or superficial ulcers of the nose and throat, the cure is very rapid. I have constantly known affections of this kind entirely cured in a fortnight or three weeks, with pleasure rather than inconvenience to the patients."

Mr. Parker did not confine himself to

this method of treatment by any means. There is no doubt but that in certain cases it is superior to all methods of treatment, especially in cases where the nose and nasal cavities are involved.

During our civil war, at the Armory Square Hospital, Dr. Léon Alcan had charge of the mercurial vapor baths, and followed the directions as given by Mr. Parker, and ever since in desperate cases I have made use of them. In 1870 Dr. Alcan in his old age returned to Paris. During the height of the Commune in 1871, I met him. He had forgotten the little English that he once knew. He was rejoiced to see me, and took me to his humble abode, where the poor old fellow was dying of a broken heart at the sufferings of his beloved country.

At the conclusion of our next service, we hope to present other methods of treating syphilis.

ALCOHOLIC MANIACAL EPILEPSY.

TRANSITORY DISTURBANCE OF CONSCIOUSNESS MEDIATING CRIMINAL ACTS.

By William Lee Howard, M. D.,

Baltimore.

THE recent cases of Duestrow, Marie Barberi, Koerner and others, have brought forward prominently the rôle alcoholic epileptic mania plays in heredity and medico-legal questions. The subject is also of paramount interest to the sociologist and the physician. It is of great importance that the latter should be able to distinguish between drunkenness as a vice and inebriety as an effect of an abnormal, unstable and degenerate inherited neurotic personality.

In this country, where intoxication is no excuse for crime, it is necessary we should recognize two phases of alcoholic inebriety: acute alcoholic insanity and alcoholic maniacal epilepsy. Such forms of insanity are now recognized by leading neurologists and alienists. A very small amount of alcohol will put a person of peculiar neurotic tendencies into a state similar to psychical epilepsy

(psychical epileptic equivalent). In this condition atrocious crimes are often committed for which the individual is not responsible. In a recent trial the presiding judge would not allow evidence on this fact to be given. He evidently did not recall that maxim of his profession: *Factum a iudice quod ad ejus officium non spectat, non ratum est.*

Great is the confusion and misunderstanding of terms when treating of "alcoholism," "inebriety," and "drunkenness." In order to avoid confusion I shall tighten up this loose nomenclature by using the terms as given by Norman Kerr. "Inebriety" is used to distinguish that "overpowering morbid impulse, crave or craze, which tends to drive certain individuals to excess in intoxicants." Scientifically this should be designated "narcomania" to cover the field of morphine, cocaine, chloral

and other allied intoxicants; but as I am dealing only with alcohol, inebriety will suffice for our purpose. Inebriety is a disease; an intoxication mania of such furor, intensity and force that men will sell their honor, barter their worldly goods and ruin those dearest to them for alcohol. The criminal acts and insane deeds of these individuals are symptoms of a diseased brain. Drunkenness is a vice.

The distinction between inebriety and drunkenness is one of perversion and perversity. This distinction as made by Krafft-Ebing is as follows: "We speak of perversion when the moral instinct is a perverted one, while we speak of perversity when it is a question of a perverse action, without taking into account the motive that has determined that action, whether it be a perverse inclination or any other motive, a criminal action, for example." Hence, perversion is an inclination independent of the will, and for which no one can be held responsible, at least in the eyes of an impartial judge; on the contrary, perversity, which is manifested in the action, must often be placed to the account of the individual.

A good example of alcoholic epileptic insanity is the Duestrow case. It also shows the powerful influence environment and heredity exerts in certain cases. Duestrow's mother was the daughter of a saloon keeper of the lower type, and was accustomed to drink at her father's place. His father belonged to the same class and was a habitual user of alcoholic drinks. These habits continued throughout the life of both parents, and the son, Arthur Duestrow, was given beer to drink when an infant. The father became suddenly wealthy when Arthur was about thirteen years of age, who at that early period in his life began a series of dissipation which continued up to the time he committed his repulsive crime. His only child, a little boy three years of age, he was passionately fond of, and devoted all of his time at home to amusing the little fellow.

On the day of the murder he drove up to his handsome residence to take this

child and its mother out sleighing. He had purchased on the way a handsome toy for the child which he took into the house with him. He called to his wife, and asked if she was ready, and then sat down to play with his son. Suddenly, without warning, he pulled a pistol out of his pocket; shot his wife, then picked up his child and fired two bullets in the little one's brain. He walked out hatless, was found on the street in a dazed condition, went quietly to the police station and there made several contrary statements. Such in rough outline is a typical case of alcoholic epileptic mania. Remember the State could prove no motive for the crime. Afterwards he continually denied knowing anything about the deed and insisted that his family were alive.

An epileptic maniac after committing a crime will when arraigned in the police court the next day admit the crime and say he was driven to it by some irresistible impulse, but when some months later he is brought to trial he denies knowing anything about the crime, and is not believed, except by those who have made this form of insanity a study. It is a very common thing for epileptics to give some inconsistent excuses for their actions; they have no accurate knowledge of what has transpired, but have a vague and indefinite idea, and attempt to excuse their conduct by absurd and illogical stories. The suddenness, the brutality, the recklessness, the atrocity and unnaturalness of such an act as Duestrow's suggest at once the suspicion of some brain disturbance.

We have to fully realize the significance of the history of these cases to distinguish the falseness or verity of these temporary disturbances of consciousness. A careful study of individuals who have had attacks of epileptic mania would show an abnormal condition of mind and morals in early life; physical timidity except when fortified by alcohol; anesthetic morality, apprehensions of all sorts of vague and indefinite happenings and an existence, both mental and physical, unnatural to the normal human being. As

these lycanthropists continue to indulge in increasing quantities of stimulants, toxic alcoholic epilepsy insidiously develops. The sudden and very transitory attacks of loss of consciousness are scarcely noticeable to the individual's bar-room comrades, or if so noticed, are accounted for by the fact that he has been drinking.

But these fits of staring which are pathognomonic of *petit mal*, called by some minor epilepsy, but which are in reality major epilepsy as regards their ultimate results, are totally different in appearance from the well-known stare seen in drunkenness. It is this peculiar characteristic of *petit mal* that differentiates it from other forms of epilepsy. We have none of the "falling-down fits," frothing at the mouth, violent muscular twitching or clonic spasms seen in major epilepsy. It also differs from the epileptiform attacks sometimes witnessed in delirium tremens. It is because the individual with commencing attacks of alcoholic epilepsy is seldom observed except by his boon companions that he continues unnoticed until the attack occurs with all its concomitant furor and ends in unaccountable and horrible deeds. These attacks of unconsciousness may be partial or complete, and last but a few seconds.

In some instances there is only slight clouding of the mind; a hazy, vague condition of the intellect, and finally during the epileptic furor complete abolition of consciousness, during which we have almost inconceivable brutality, ferocity and violence, inhuman tiger-like devilish action, which is characteristic of alcoholic epileptic insanity. This is not the masked epilepsy of some writers. No disease can be masked whose symptoms are so plainly demonstrable. The disease is masked in so far that these cases seldom come under the notice of the physician until the epileptic explosion has taken place which has brought the individual into unenviable and often very unfortunate notoriety. The layman cannot diagnosticate a drunken stare from an epileptic stare.

It is beyond cavil that the confused disturbed mental conditions which fre-

quently manifest themselves in persons who are habitual and hard drinkers and yet have no epilepsy, are not the same confusion seen in alcoholic epilepsy. The alcoholic stare is a drowsy, sleepy sort of stare and there is no fixedness of the body, as well as the muscles of the eye; the attention of the person can be attracted or changed. In the drunken stare the peculiar expression of the eye continues while the individual is speaking while, on the other hand, the epileptic stare ceases on return to consciousness.

The epileptic stare is sharp, sudden and instantaneous and there is a fixedness of the muscles, as well as the features of the eye. This fixedness of the eye is a pronounced mark of minor epilepsy. We also frequently notice the sudden grasping by the hand of the nearest object. In court the question often arises, when the plea of alcoholic epileptic insanity is used, "Was not the deed done in a state of alcoholic furor?" The facts of the case easily decide the question.

In alcoholic epileptic insanity the period of anger is preceded by a calm attitude; then comes the sudden period of ferocity during which the deed is done; almost immediate subsidence of the furor, followed by partial or complete ignorance of the act. If the deed was committed in a state of ordinary alcoholic furor the ferocious condition would be manifest until the alcohol which was causing it lost its influence. In other words, the condition would last as long as the effects of the alcohol continued. These individuals who suffer from minor epilepsy do not indicate any physical conditions which would differentiate them from normal individuals. The form of so-called alcoholic epilepsy which is unaccompanied by mania, while recognized by many authorities as being, *per se*, caused by excessive indulgence in alcohol, does not offer sufficient evidence as yet to allow us to be positive in the matter. In those suffering from attacks of idiopathic minor epilepsy the use of alcohol unquestionably causes maniacal attacks. The knowledge that such attacks are probable should prevent the use of alcohol in any form by

those who have been subject to minor epilepsy; and should such individuals with a full sense of this fact commit crime when in a state of alcoholic epileptic mania, they should be held guilty. According to Garnier, the offsprings of alcoholic parents are prone during adolescence to attacks of epileptic mania. They exhibit a psychological as well as a cerebral degeneration. A certain mental condition accompanies, precedes,

or follows attacks of minor epilepsy. This is mental depression and it frequently ends in insanity. Such attacks of insanity take the place of staring and the other well-known objective symptoms noticed in minor epilepsy and are known as equivalents, psychical substitutes. This condition is frequently observed in cases where not the slightest attacks of a minor epileptic nature have been manifested or known to exist.

ANTI-STREPTOCOCCIC SERUM.—The results obtained hitherto in the treatment of septicemia by means of the antitoxic serum of Marmorek have been very much less marked than those which have followed the antitoxine of diphtheria. Its use in the treatment of puerperal fever has not been attended with brilliant success. It is to be remembered, however, says the *British Medical Journal*, in this connection that the serum has in some, and probably in many, instances been injected after the disease had become well-established in the system of the patient. In view of the very rapid absorption of the septic poison in these cases, and of the large uterine surface available for this purpose, the significance of such delay should not be overlooked. It is probable, too, that the disease under treatment has not always been the effect of the streptococcus alone, but primarily sapremic and a consequence of putrefaction in retained coagula. It is, however, encouraging to note that even in the treatment of puerperal cases a distinct amelioration of symptoms after injection has been noticed by some French observers (Patru, Maillart, Ribemont, etc.). M. Boucheron speaks highly of his results in the treatment of purulent dacryocystitis by this method, injections of 5 c.c. repeated at intervals of a few days having a marked effect even in chronic cases of this disease. He employs the serum also as a preventive of possible suppuration after cataract operations. As yet it would seem that the antitoxic power of this remedy is not great, and it may be that the secret of success in acute cases lies, not only in the prompt-

itude of its employment, but in the frequency of its repetition. The most that can be said so far is that past experience, though indecisive, is encouraging rather than otherwise, and lends some color to the hope that with a purer and more powerful serum better results may be expected. Practitioners who have had to combat the horrors of puerperal septicemia are not likely to undervalue even such hope in this connection.

* * *

IS THE WORD AUTOPSY CORRECT?—A writer in the *Journal of the American Medical Association* believes that the word "autopsy" is not sufficiently comprehensive in defining a post-mortem examination, for he says it simply means "seeing for one's self." He also thinks that the word necropsy is not far-reaching enough in that it means the examination of a body, which may be a superficial examination, so he suggests the word "necrotomy" as covering the idea desired.

* * *

HYSTERIA SIMULATING ECLAMPSIA IN PREGNANCY.—Bescarlet (*British Medical Journal*) reported at the Geneva Congress the case of a pregnant woman who caught cold and inflammation of the kidney ensued. The fetus died, and several convulsive attacks followed. Bescarlet maintained that they were purely hysterical. The chief positive evidence was their punctual recurrence at a certain time for several nights in succession. They differed from even mild eclampsia by the absence of vomiting, coma, deranged vision and facial convulsions.

Medical Progress.

REPORT OF PROGRESS IN GYNECOLOGY.

By Thomas H. Buckler, Jr., M.D.,
Baltimore.

SHORTENING THE ROUND LIGAMENTS.

IN a lengthy and exhaustive paper (*American Gynecological and Obstetrical Journal*) Dr. George M. Edebohl discusses the indications for, technique and results of shortening the round ligaments of the uterus.

The writer deals with the extra-peritoneal or inguinal shortening of the ligaments exclusively and claims that the operation is far superior to ventral or vaginal fixation of the uterus, intra-abdominal shortening of the ligaments, cystoplexy of the uterus and operative procedures in the utero-sacral ligaments, in being more physiological in its plan and results and in interfering in a less degree, if at all, with child-bearing and child-birth.

While the record of disasters of pregnancy and parturition following vaginal fixation is so appalling that the operation is contra-indicated in any case with the possibility of future pregnancies, and while that of ventral fixation is almost as bad, no disturbances—with the exception of slight drawing pain, beginning with the eighth month, eight pregnancies have been observed to follow shortening of the round ligaments, the operation is indicated in all uncomplicated cases of retro-version, retro-flexion and excessive mobility of the uterus requiring operative treatment in aggravated ante-flexion of the uterus when the fundus is below the level of the internal inguinal ring, in cases of retroverted ante-flexed uteri without adhesions and in simple prolapse of the ovaries without adhesions, when that condition calls for treatment. Prior to the operation the uterus should be curetted and all plastic work called for upon the cervix, vagina or perineum performed.

All adhesions between the uterus and annexa must be severed and the operator must satisfy himself that the uterus can

be well anteverted by bimanual manipulation. The operation is best performed "by opening the whole length of the anterior wall of the inguinal canal, drawing the ligament out at the internal ring, really shortening the intra-abdominal portion by stripping back the investing peritoneum and closing the wound after the manner of the Bassini operation for the radical cure of inguinal hernia, leaving and securing the shortened ligament in its natural habitat below the lower edge of the internal oblique."

Of one hundred and sixteen cases operated on by the author, four were absolute failures, two of which were subsequently cured, one by vaginal and one by ventral fixation. There were five relative failures due to giving way of one round ligament within the abdomen. These were subsequently cured by ventral fixation. In the remaining one hundred and six patients the uterus remained in normal anteversion.

ELECTRICAL TREATMENT OF FIBROIDS.

In a recent discussion of the treatment of fibroid tumors (*Transactions of the Obstetrical Society of Philadelphia*) Dr. G. Betton Massey stated that his statistics in the electrical treatment of fibroids were most gratifying. In 75 cases that had undergone treatment and whose present condition he had ascertained after periods varying from eight to two years since the cessation of treatment, 85 per cent. showed practical success. Fifteen per cent. were made no better nor worse and one case had been made worse.

UTERINE FIBROMATA.

In a paper on the "Improved Technique of Vaginal Ligation of the Uterine Arteries for Uterine Fibromata; Indications for the Operation (*Medical Record*), Dr. Augustin H. Goelet states that this operation has not obtained its deserved place as a conservative surgical measure. This failure he believes due to the circulation not having been permanently cut off, the vessels not being completely or permanently obliterated, or its indications have not been clearly understood. While the opera-

tion has only a limited application in fibroid conditions of the uterus, it involves little or no risk, it is quickly and easily performed; the convalescence is rapid, the relief of symptoms is prompt, it ultimately results in complete or almost complete atrophy of the tumor and it does not unsex, mutilate or disable the patient.

TOXINES IN UTERINE TUMORS.

Dr. R. M. Stone reports (*New York Medical Journal*) a case of malignant uterine tumor treated by the toxines of erysipelas and bacillus prodigiosus. The patient, forty-two years old, first came under observation in May, 1895. An examination six months later showed a large, eroded cervix. Curettage was performed and a large portion of uterine tissue removed. Examinations made by several pathologists pronounced the growth malignant. The patient's condition grew rapidly worse and examination November 30 showed decided infiltration and nodulation of both broad ligaments.

On December 4, three minims of the infiltrated toxines of erysipelas and bacillus prodigiosus were injected between the shoulder blades. No reaction followed. On December 5, seven; 6, ten; 7, fourteen; 8, twenty minims were injected with no reaction. This treatment was continued until December 20 with negative result. It was then decided to go nearer the seat of the disease and on December 21, nineteen minims were injected in the vagina. This was followed in twenty minutes by chills. Temperature rose to $104\frac{1}{2}^{\circ}$ F. and death seemed near. The patient rallied slowly, but the treatment could not be resumed until January 2, when three minims were injected in the vagina, in which locality all subsequent injections were made.

From January 21 to March 6, the filtered toxines were used and twenty-seven injections, varying from three to twenty-three minims, were given. From March 15 to 24, eight injections of from five to thirty minims were given. Treatment was again continued from April 8 to May 25. On this date there was violent reaction and the patient's

symptoms became very alarming. On May 4 an examination failed to find any infiltration in the broad ligaments and the uterus was much atrophied. October 31, 1896, the patient was well and vigorous, weighed ten pounds above normal weight. Had no pelvic pain and had resumed household duties. As far as the literature upon the treatment of malignant, inoperable tumors by toxines is recorded, this case is unique.

* * *

MASSAGE IN FRACTURES. — Of late much has been written on the ambulatory treatment of fractures and now Dr. George Woolsey brings up, in the *Medical News*, the old story of massage in the treatment of fractures. Time is wasted and the health is much impaired by the rest necessary in treating some fractures. Therefore he concludes as follows:

1. The treatment of fractures, especially those near joints, by immobilization, whether ambulatory or not, leaves something to be desired in (a) the time required and (b) the functional result obtained.

2. The treatment of such fractures by massage and passive motion shortens the time of bony union by one-third or one-half, and vastly improves the immediate functional result.

3. This treatment is especially applicable and important in fractures near joints.

4. Its application is easy. It relieves pain and swelling, hastens callus formation and solidification, prevents atrophy of the muscles and stiffness of the joints and tendons.

5. Splints should be applied between the daily fifteen or twenty-minute applications of massage for the first ten or twenty days, according to the nature of the fracture and the tendency to displacement, or until consolidation occurs.

6. This treatment, combined with the ambulatory method, promises an ideal method.

7. Oblique fractures of both or the only bone in a limb, or fractures near the middle of the limb with a tendency to displacement, should be immobilized until consolidation has commenced.

MARYLAND Medical Journal.

PUBLISHED WEEKLY.

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MARYLAND MEDICAL JOURNAL,

209 Park Ave., Baltimore, Md.

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BALTIMORE, APRIL 10, 1897.

RECENT numbers of *Merck's Report* contain a very straightforward and honest paper by Mr. Henry P. Hynson, the well-known pharmacist of Baltimore, on the practical methods of establishing congenial relations between pharmacists and physicians.

After reading the article one will not be surprised to know that it took the first prize offered by that paper in a recent literary contest, for it shows practical acquaintance with the subject treated. Respectability is the first requisite to success. If relations between the two great professions of the healing art become strained, rupture will follow, and while the weaker will go to the wall, the sick will suffer.

The author maintains that the physician prefers to patronize that pharmacist who attends strictly to business and who applies his best efforts to the demands of the physician and his patient rather than in trying to make up on the side lines of soda water, proprietary preparations, stationery, candy, and the

many other articles which do not belong to a legitimate pharmacy.

The pharmacist who covers the front of his store with signs of all kinds is not carrying on business in the right way. He should keep no preparation that would not be prescribed by the physician and should add to his stock sick-room appliances, nurses' requisites, dietetics, modern equipments for infant feeding, etc.

Counter prescribing should stop and no clue should be given the patient as to what the prescription contains and substitution should be avoided most studiously. Advertising by sending out from time to time dignified and well-worded circulars which attract attention is permissible.

Mr. Hynson says further: "Let your customers distinctly understand that you are in no sense a physician—that you refrain from prescribing for them, not because you are unwilling to accommodate them, but because you regard their well-being too highly to trifle with it in a superficial way."

The author makes a good point when he says that a physician should pay for everything, except for inexpensive medicine for strictly personal use. No self-respecting physician cares to receive free drugs and preparations from the pharmacist.

Medical men cannot be prevented from furnishing their own medicine, but defeat can be turned into victory by supplying them with drugs at a rate which will gain their custom. While legally the prescription belongs to the patient, the druggist will only repeat it on order from the physician or when he feels that no bodily harm is done by the repetition.

The author's statement will meet the approbation of all physicians and the profession would feel repaid by a perusal of this well written article.

That such talk is not theory is shown by the author's own business, which is in every way a success and which has gained the respect and admiration of the profession everywhere. New York has now a legitimate pharmacy, where principles such as those laid down in this article are followed. Of course, there are plenty of good, conscientious pharmacists who do a good prescription business, who are honest to the smallest detail, and yet who, like a country store, sell a large variety of articles foreign to the drug trade.

There cannot, however, but be a feeling of confidence and certainty in a pharmacist who sticks strictly to the prescription and sick-room business and who gives the same care and detail to the smallest order. Congenial relations between the pharmacist and physician are necessary for success in both branches of the healing art, and such work as Mr. Hynson's, which tends to further the congenial relations, should be encouraged.

* * *

It is unfortunate that, soon after each solution of the artificial feeding problem for infants has been received as satisfactory, some inquisitive genius or observing clinician should demonstrate that it is, like its predecessors, defective. It seems that after all we shall have to get back somehow, by evolution, involution or revolution, to the antiquated method of breast-nursing. Healthy mothers are probably more easy to evolve that "perfect substitutes for mother's milk," if women would only open their eyes to the injustice and injury done to infants by depriving them of their normal nutriment.

"If only we could kill the germs in cow's milk it would be just as good as breast milk;" but when we do kill all the germs by long boiling the babies get scurvy. "But we will kill most of the germs, all the harmful ones, by Pasteurization;"—now at last the final desideratum is reached, babies not getting scurvy.

Alas for the vanity of substitution. A German—it is usually a German—(A. Lübbert, *Centralblatt für Kinderheilkunde*, March) tells us that he finds in cow's milk a bacterium whose growth is favored by heat and whose spores in milk resist steam or water-bath sterilization for even two hours at a time at a temperature of 210°. Even when very abundant in milk they do not outwardly change it so as to give warning of danger. Milk in which they are growing will if fed to guinea-pigs or puppies kill them in a few days with diarrhea.

The moral suggested is that too much dependence must not be placed on treatment of milk by heat, and that heated milk must not be permitted to remain warm after removal from the heater, but should at once be cooled below the temperature at which bacteria grow.

THE result of work in sanitariums especially built for the treatment of pulmonary consumption is shown in the twelfth annual report of the *Sanitariums for Consumption*. Adirondack Cottage Sanitarium just issued. Dr. Trudeau reports that 177 patients were treated during the year 1896, and 71 were still at the sanitarium at the time of this report. Of the remaining 106 to be reported on for the past year, 24 were discharged apparently cured, 37 with the disease arrested, 21 were improved and 24 were unimproved or failed. Of the 17 patients remaining three months or less when admitted, 7 were incipient cases, 3 were advanced and 7 far advanced. When discharged, 3 were apparently cured, 5 had the disease arrested, 3 were improved and 6 failed. Ten patients gained weight on an average of 10½ pounds and one lost 5¾ pounds. Of the 89 patients who remained from 3 to 25 months, of 18 incipient cases, 15 were cured, 3 had the disease arrested; while of 45 advanced cases, 5 were cured, 22 had the disease arrested, 10 were improved and 8 failed; and of 20 far advanced cases, 7 had the disease arrested, 8 were improved and 10 failed. The bacilli disappeared from a large number and 6 out of 14 were cured by the modified tuberculin treatment.

He divides the cases into the following groups:

1. *Incipient*. Cases in which both the physical and rational signs point to but slight local and constitutional involvement.
2. *Advanced*. Cases in which the localized disease-process is either extensive or in an advanced stage, or where, with a comparatively slight amount of pulmonary involvement, the rational signs point to grave constitutional impairment or to complication.
3. *Far advanced*. Cases in which the rational and physical signs warrant the term.
4. *Apparently cured*. Cases in which the rational signs of phthisis and the bacilli in the expectoration have been absent for at least three months or who have no expectoration at all; any abnormal physical signs remaining being interpreted as a healed lesion.
5. *Arrested*. Cases in which cough, expectoration and bacilli are still present, but in which all constitutional disturbance has disappeared for several months; the physical signs interpreted as an arrested process.

There were no deaths.

Medical Items.

We are indebted to the Health Department of Baltimore for the following statement of cases and deaths reported for the week ending April 3, 1897.

Diseases.	Cases Reported	Deaths.
Smallpox.....		
Pneumonia.....		23
Plithisis Pulmonalis.....		20
Measles.....	29	
Whooping Cough.....	5	
Pseudo-membranous Croup and Diphtheria. }	13	4
Mumps.....	6	
Scarlet fever.....	34	4
Varioloid.....		
Varicella.....		
Typhoid fever.....	2	

Denver is to have a building exclusively for doctors' offices.

A man in Philadelphia has been fined for spitting in the street cars.

Fredericksburg, Virginia, is trying to build a hospital for the poor of the borough.

There are 93 graduates of the College of Physicians and Surgeons of Baltimore, this year.

Private-docent G. Klemperer, formerly Leyden's assistant at Berlin, has been made professor.

Dr. Herbert Harlan has moved his office and residence to 516 Cathedral Street. Office hours, 9 A. M. to 1 P. M.

The Maryland Prisoners' Aid Association regrets to lose Dr. John Morris, who has seen fit to resign from its board.

June 8 will be the date of the forty-fourth Annual Meeting of the Medical Society of the State of North Carolina.

The San Francisco Board of Health has issued orders that no Chinaman shall hereafter spit on clothes that he is ironing.

Dr. William T. Howard, whose resignation was announced from the University of Maryland, will neither confirm nor deny the report.

Dr. Ernest Brand, who is so well known in connection with hydrotherapy in typhoid fever, died recently in Stettin, Germany, aged 70 years.

A meeting of the physicians of Baltimore County has been called to be held in Grange Hall, Towson, on April 15, for the purpose of organizing a medical society.

Dr. Paul Gibier of the Pasteur Institute of New York proposes to set aside a certain number of beds for the free treatment of physicians affected with tuberculosis.

Georgia requires more than registration with the county clerk, as was stated by an exchange. This State has had a board of medical examiners for more than two years.

Washington, D. C., is about to organize a Sanitary Improvement Company to provide sanitary dwellings for the poor. A mass meeting was held at the Foundry M. E. Church to consider the matter, and Dr. Sternberg spoke in its behalf.

Mr. Henry Brauns has resigned from the State Board of Health. If a public office is a public trust, it would seem as if Mr. Brauns should consider carefully before he withdraws his support from a body which he so recently promised to serve and so well served.

The Fourth Annual Meeting of the American Publishers' Association will be held in Philadelphia, on Monday, May 31, 1897 (the day preceding the meeting of the American Medical Association). Editors and publishers, as well as everyone interested in medical journalism, are cordially invited to attend and participate in the deliberations. Several very excellent papers are already assured, but more are desired. In order to secure a place on the programme, contributors should send titles of their papers at once to the Secretary, Chas. Wood Fassett, St. Joseph, Mo.

The Annual Conversational Meeting of the Pathological Society of Philadelphia will be held in the upper hall of the College of Physicians, Northeast Corner Thirteenth and Locust Streets, on Thursday, April 22, 1897, at 8.15 P. M. Dr. Ludvig Hektoen, Professor of Morbid Anatomy in Rush Medical College, will deliver an address, entitled "Segmentation and Fragmentation of the Myocardium." After the meeting a reception will be tendered Dr. Hektoen at the University Club, 1316 Walnut Street. A cordial invitation is extended to attend the meeting and the reception.

Book Reviews.

THE YEAR-BOOK OF TREATMENT FOR 1897. A Critical Review for Practitioners of Medicine and Surgery. Crown octavo, 488 pages. Cloth, \$1.50. Philadelphia and New York. Lea Brothers & Co. 1897.

This Year-Book, a reprint of the English edition, is a very valuable one, as it is carefully prepared by competent men, and gives an excellent summary of the progress in practical medicine during the past year. For example, we have seen no summary so good as the Schott treatment of heart disease, by Dr. Coupland. To take another illustration, the question of deciduoma malignum, the nature of which has been so much discussed, is reviewed very fully by Dr. Handfield Jones. The abstracts of this Year-Book are prepared by a group of the best trained of the younger generation of the London physicians and surgeons. The small, compact character of the volume is also a great advantage.

DR. J. H. KENNEDY of Aberdeen, Md., who is a man of keen observation, with natural powers of description, has contributed to the April number of *Harper's Monthly* a most enjoyable article on "Wild Things in Winter," showing the habits of certain animals when food is scarce. Dr. Kennedy is a graduate of 1874 of the old Washington Medical College, now the College of Physicians and Surgeons. He has an excellent practice at Aberdeen, Maryland, and vicinity.

THE *Journal of Cutaneous and Genito-Urinary Diseases* is now published by the Physicians' Publishing Company, 115 West Eighty-fourth Street, New York. Dr. James C. Johnston is the Acting Editor.

THE *Columbus Medical Journal*, of which Dr. R. Harvey Reed is editor and manager, has removed from 150 East Broad Street, to its new quarters, 68 Buttles Avenue, Columbus, Ohio.

DR. WILLIAM C. WILE of Danbury, Connecticut, has combined the *New England Medical Monthly* and *Prescription* in one journal.

REPRINTS, ETC., RECEIVED.

Transfusion, Infusion and Auto-Transfusion; Their Comparative Merits and Indications. By August Schachner, M. D., Louisville. Reprint from the *American Practitioner and News*.

Current Editorial Comment.

MEDICAL CHARITY.

American Medico-Surgical Bulletin.

It is at present a question of serious importance whether or not a large part of the free medical service at present bestowed upon the public is not a crime instead of a charity. Surely no system of ethics would ever claim that the production of a condition of degradation, and the consequent injury of the recipient of a so-called charity, could result from any act truly charitable.

HOSPITAL ABUSE.

Medical News.

THE prime idea of managers of dispensaries is to report yearly the greatest possible number of patients treated, prescriptions filled and visits made by their district physicians. Largely dependent for support, as most of them are, upon voluntary contributions, the more show they make of their indiscriminate giving, the more money will they receive. It naturally follows that in less than half our dispensaries only a mere pretense of inquiry is made into the real necessity of the patient. In almost none are adequate measures employed to detect and prevent fraud. In few, if any, is the doctor vested with any discretionary power. Thus rich and poor alike find shelter under the ample cloak of charity.

WOMEN IN MEDICINE.

Kansas Medical Journal.

WOMEN are important factors in medicine. Not so much from the work they do in practice as the importance they are to the general and special practitioner in the make-up of his business. It is hardly an exaggeration to say that the bulk of practice comes from the women. The men and the children are occasionally callers upon the physician's skill, but not near so frequently or so constantly as women. The wife and mother is apparently the victim of many ailments. She is at least treated for many, and altogether too frequently comes under the class of chronics. Naturally when she begins to complain, uterine trouble is suspected and it is not hard to find. A long period of uterine treatment giving no relief, she is subjected in turn to all the special and general treatments in the usual line. She is the source of income to the doctor, and occasionally calls heavily upon the purse of her husband.

Publishers' Department.

Society Meetings.

BALTIMORE.

- BALTIMORE MEDICAL ASSOCIATION, 847 N. Eutaw St. JAS. E. GIBBONS, M. D., President. E. L. CRUTCHFIELD, M. D., Secretary. Meets 2d and 4th Mondays of each month.
- BOOK AND JOURNAL CLUB OF THE FACULTY. Meets at call of President.
- CLINICAL SOCIETY, 847 N. Eutaw St. Meets 1st and 3d Fridays—October to June—8.30 P. M. S. K. MERRICK, M. D., President. H. O. REIK, M. D., Secretary.
- GYNECOLOGICAL AND OBSTETRICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d Tuesday of each month—October to May (inclusive)—8.30 P. M. WILMER BRINTON, M. D., President. W. W. RUSSELL, M. D., Secretary.
- MEDICAL AND SURGICAL SOCIETY OF BALTIMORE, 847 N. Eutaw St. Meets 2d and 4th Thursdays of each month—October to June—8.30 P. M. J. B. SCHWATKA, M. D., President. S. T. ROEDER, M. D., Corresponding Secretary.
- MEDICAL JOURNAL CLUB. Every other Saturday, 8 P. M. 847 N. Eutaw St.
- THE JOHNS HOPKINS HOSPITAL HISTORICAL CLUB. Meets 2d Mondays of each month at 8 P. M.
- THE JOHNS HOPKINS HOSPITAL MEDICAL SOCIETY. Meets 1st and 3d Mondays, 8 P. M.
- THE JOHNS HOPKINS HOSPITAL JOURNAL CLUB. Meets 4th Monday, at 8.15 P. M.
- MEDICAL SOCIETY OF WOMAN'S MEDICAL COLLEGE. SUE RADCLIFF, M. D., President. LOUISE ERICH, M. D., Corresponding Secretary. Meets 1st Tuesday in the Month.
- UNIVERSITY OF MARYLAND MEDICAL SOCIETY. Meets 3d Tuesday in each month, 8.30 P. M. HIRAM WOODS, JR., M. D., President. E. E. GIBBONS, M. D., Secretary.

WASHINGTON.

- CLINICO-PATHOLOGICAL SOCIETY. Meets at members' houses, 1st and 3d Tuesdays in each month. ARTHUR SNYDER M. D., President. R. M. ELLYSON, M. D., Corresponding Secretary. R. T. HOLDEN, M. D., Recording Secretary.
- MEDICAL AND SURGICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets 1st Thursday each month at members' offices. FRANCIS B. BISHOP, M. D., President. LLEWELLYN ELIOT, M. D., Secretary and Treasurer.
- MEDICAL ASSOCIATION OF THE DISTRICT OF COLUMBIA. Meets Georgetown University Law Building 1st Tuesday in April and October. W. P. CARR, M. D., President. J. R. WELLINGTON, M. D., Secretary.
- MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA. Meets Wednesday, 8 P. M. Georgetown University Law Building. S. C. BUSEY, M. D., President. HENRY L. HAYES, M. D., Recording Secretary.
- OPHTHALMOLOGICAL AND OTOLOGICAL SOCIETY OF WASHINGTON. Meets monthly at members' offices. President, S. O. RICHEY, M. D. Secretary, W. K. BUTLER, M. D.
- WOMAN'S CLINIC. Meets at 1833 14th Street, N. W., bi-monthly, 1st Saturday Evenings. MRS. EMILY L. SHERWOOD, President; DR. D. S. LAMB, 2nd Vice-President. MISS NETTIE L. WHITE, 2nd Vice-President. MRS. MARY F. CASE, Secretary. MISS MINNIE E. HEIBERGER, Treasurer.
- WASHINGTON MEDICAL AND SURGICAL SOCIETY. Meets 1st Monday in each month. N. P. BARNES, M. D., President. F. W. BRADEN, M. D., Secretary.
- WASHINGTON OBSTETRICAL AND GYNECOLOGICAL SOCIETY. Meets 1st and 3d Fridays of each month at members' offices. GEORGE BYRD HARRISON, M. D., President. W. S. BOWEN, M. D., Corresponding Secretary.

PROGRESS IN MEDICAL SCIENCE.

NORWICH PHARMACAL Co.—*Gentlemen*: Unguentine has been given a place on my medicine shelf. I care for nothing more effectual in all conditions indicating its use, such as ulcers, fresh burns, contused wounds, etc.—Very respectfully yours, PATTON GRIFFITHS, M. D., Division Surgeon Louisville, New Albany and Chicago Railway, office 1026 Jefferson Street, West Louisville, Ky.

PROTONUCLIN is indicated in all forms of wasting processes, anemia, indigestion and in the various nerve affections, and as a general tonic and blood elaborator. Its now well recognized influence in establishing the white blood corpuscle to its normal usefulness in the economy bespeaks its place in scientific medicine. Protonuclein is administered internally as a tablet, containing three grains, while it is applied externally as a dusting powder, or may be used for insufflating purposes. It is also used hypodermically where it is impractical to give it otherwise. Reed and Carnrick, the manufacturers of this preparation, issue specific instructions as to its administration.

TO THE RESINOL CHEMICAL Co., Baltimore, Md.—*Sirs*: Pruritis vulva and ani, as well as itching piles, in my practice of twenty-eight years, were formerly considered as terrors to physicians as well as patients. Since Resinol has made its appearance, they have lost their terror and to it belongs the blue ribbon. Three cases of the first, two of the second and one of the third ailments yielded very readily by the use of Resinol to my own and patients' astonishment after other remedies had been used in vain for some time. With it I have also cured two cases of scrotal eczema, that were exceedingly obstinate before under other treatment. Lastly, I used it on scabies (5 cases in one family), and all were sound and well in a very short time, after two other physicians had tried in vain for some time before. I am adverse to the recommendation business, but must give praises in this instance, as it has given me in my practice much better results than solutions of carbolic acid, cor. suhl, etc., and ought to be, I think, in every physician's medicine case. It has no caustic properties, but is certainly the "Fitz" amongst the germ killers.—WM. CASPARI, M. D., Mitchellsburg, Ky., March 31, 1897.



